This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

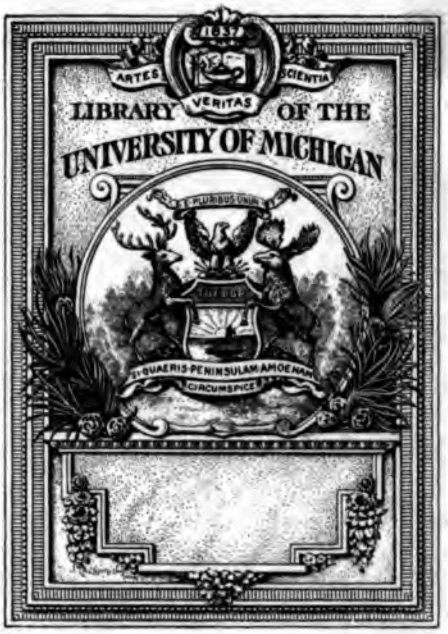
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

B 1,097,444



LIBRARY OF THE
UNIVERSITY OF MICHIGAN

Compliments of

THEODORE NELSON,

Superintendent of Public Instruction.

Lansing, M.

FORTY-SEVENTH ANNUAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION

OF

THE STATE OF MICHIGAN,

WITH

ACCOMPANYING DOCUMENTS

FOR

THE YEAR 1885.

BY AUTHORITY.

LANSING:
THORP & GODFREY, STATE PRINTERS AND BINDERS.
1886.

GENERAL LIBRARY
OF THE
UNIVERSITY OF MICHIGAN

TABLE OF CONTENTS.

ANNUAL REPORT.

SUPERINTENDENT'S REPORT:

PAGE
Introductory ... xi
Examination and Supervision ... xii
Teachers' Institutes ... xiii
School Law ... xiv
Supreme Court Decisions ... xv
Geology as an Element in Early Education ... xv
State Teachers' Reading Circle ... xviii

EDUCATIONAL FUNDS:

The Primary School Funds ... xx
The Primary School Interest Fund ... xx
The University Fund ... xxi
The Agricultural College Fund ... xxi
The Normal School Fund ... xxi

STATE INSTITUTIONS:

The University ... xxii
The Agricultural College ... xxiv
The Normal School ... xxvi
State Reformatory and Charitable Institutions ... xxviii
INCORPORATED INSTITUTIONS: ... xxviii
Adrian College ... xxix
Albion College ... xxix
Battle Creek College ... xxx
Detroit College ... xxx
Hillsdale College ... xxxi
Hope College ... xxxi
Kalamazoo College ... xxxii
Olivet College ... xxxiii
Detroit Home and Day School ... xxxiii
Michigan Military Academy ... xxxiii
Somerville School ... xxxiv
Spring Arbor Seminary ... xxxiv
German-American Seminary ... xxxiv
Raisin Valley Seminary ... xxxiv
Michigan Female Seminary ... xxxv

STATISTICAL TABLES:

PAGE.
Comparative Statistics for 1884 and 1885 xxxvii
Apportionment of the Primary School Interest Fund, May, 1885 xlii
Apportionment of the Primary School Interest Fund, November, 1885 xlv
General School Statistics xlvii
Employment of Teachers l
Resources of School Districts lii
Expenditures of School Districts lv
Miscellaneous Financial Statistics lvii
Per Capita Cost of Public Schools lx
Statistics of Township Libraries lxii
Statistics of District Libraries lxv
Branches of Instruction lxvii
Private and Select Schools, and School Apparatus lxx
Examination and Certification of Teachers lxxii
Miscellaneous Statistics lxxv
Graded School Statistics lxxviii
Financial Statistics of Graded Schools xcvi
Miscellaneous Statistics of Graded Schools ciii
High School Statistics cx
Grammar School Statistics cxii
Primary School Statistics cxiv
Receipts and Expenditures at Teachers' Institutes cxvi
Local Committees, Conductors, etc., Teachers' Institutes cxx
Enrollment at Teachers' Institutes cxxii
General Statistics of State and Incorporated Institutions cxxv
Financial Statistics of State and Incorporated Institutions cxxvii
Members of County Boards of Examiners, 1885-6 cxxix

ACCOMPANYING DOCUMENTS.

UNIVERSITY OF MICHIGAN:

Report of the President 8
Report of Finance Committee 14
Report of the Treasurer 16
Legislative Appropriation 20
Examinations for Degrees 21
Report of Board of Visitors 22

STATE BOARD OF EDUCATION:

Annual Report 23
Report of the Principal of the Normal School for 1884-5 26
Report of Board of Visitors to Normal School for 1884-5 37
Financial Exhibit for 1884-5 39

STATE AGRICULTURAL COLLEGE:

Report of Secretary of State Board of Agriculture for 1884-5 45
In Memoriam—Hon. H. G. Wells 53
Inaugural Address of President Edwin Willits 54

STATE PUBLIC SCHOOL FOR DEPENDENT CHILDREN:

Report of the Superintendent 64

ADRIAN COLLEGE:

PAGE.

Report of the President 68
Report of Board of Visitors 74

ALBION COLLEGE:

Report of the President 76

BATTLE CREEK COLLEGE:

Report of the President 81

DETROIT COLLEGE:

Report of the President 84
Report of Board of Visitors 86

DETROIT HOME AND DAY SCHOOL:

Report of the Secretary 88

HILLSDALE COLLEGE:

Report of the President 91

HOPE COLLEGE:

Report of the President 101
Report of Board of Visitors 105

KALAMAZOO COLLEGE:

Report of the President 106

OLIVET COLLEGE:

Report of the President 110
Report of Board of Visitors 118

MICHIGAN FEMALE SEMINARY:

Report of Board of Visitors 120

MICHIGAN MILITARY ACADEMY:

Report of the Superintendent 121
Report of Board of Visitors 122
Report of Board of Inspectors 122

SOMERVILLE SCHOOL:

Report of the Principal 124
Report of Board of Visitors 125

GERMAN-AMERICAN SEMINARY:

Report of Board of Visitors 126

COUNTY SCHOOL EXAMINERS.

FIFTH ANNUAL MEETING:

Minutes of Meeting 129
Paper—"Real Work of County Boards" 132

STATE TEACHERS' ASSOCIATION.

TRANSACTIONS OF THE THIRTY-FIFTH ANNUAL MEETING:

Minutes 137
Report of Treasurer 144
List of Members, 1885 145
President's Address—"School Differentiation" 147
Address, Supt. B. A. Hinsdale—"Public School Problems" 155

PAPERS AND DISCUSSIONS:

PAGE.
"School Sanitation" 171
"The Law of Liberty" 187
"The Value of Military Training in Schools" 196
"Personality of the Teacher" 204
Report of the Committee on the Blair Educational Bill 214
Report of the Committee on Teachers' Reading Circle 216
"A Problem in Education" 225
INDEX 237

STATE OF MICHIGAN,
DEPARTMENT OF PUBLIC INSTRUCTION,
Lansing, December 31, 1885.

To His Excellency, RUSSELL A. ALGER,
Governor of the State of Michigan:

SIR,—In compliance with the provisions of law, I have the honor herewith to transmit through you to the Legislature, the annual report of the Superintendent of Public Instruction, together with the accompanying documents, for the year 1885.

Very respectfully,
Your obedient servant,
THEODORE NELSON,
Superintendent of Public Instruction.

DIAGRAM I.

COMPARING THE AVERAGE MONTHLY WAGES OF TEACHERS FROM 1861 TO 1885.

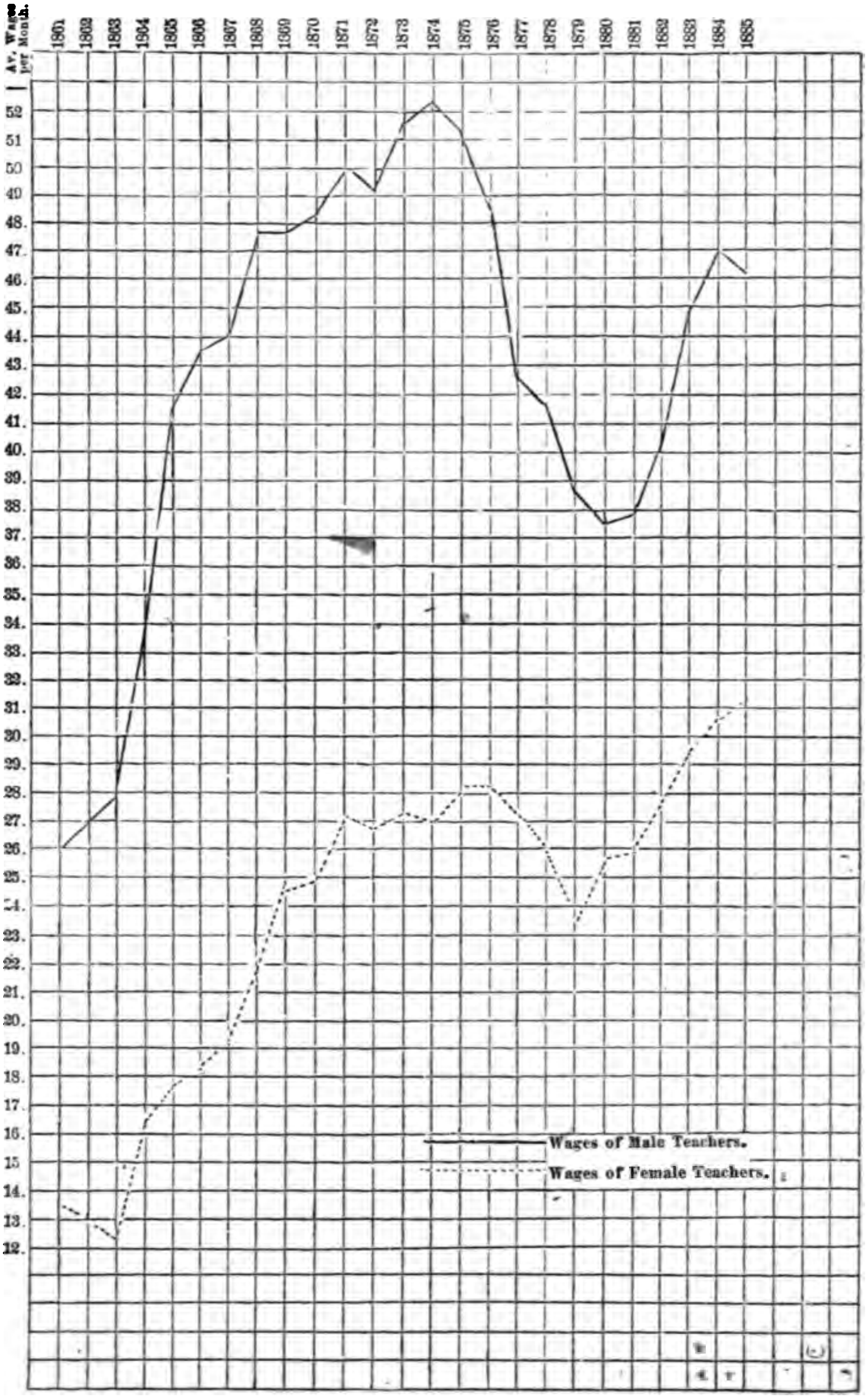


DIAGRAM II.

Comparing the Per Cent. of Attendance to School Population, from 1861 to 1885.

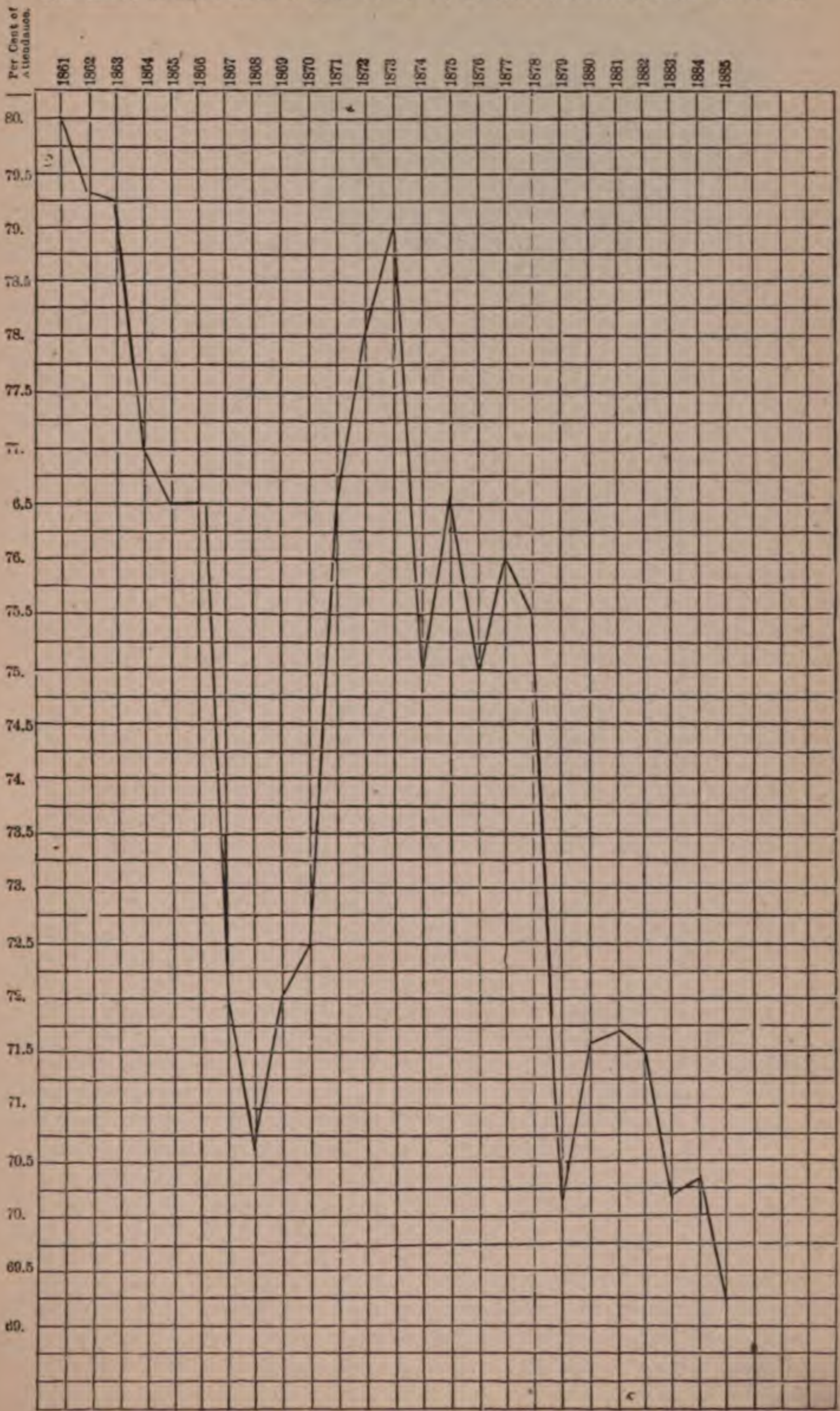
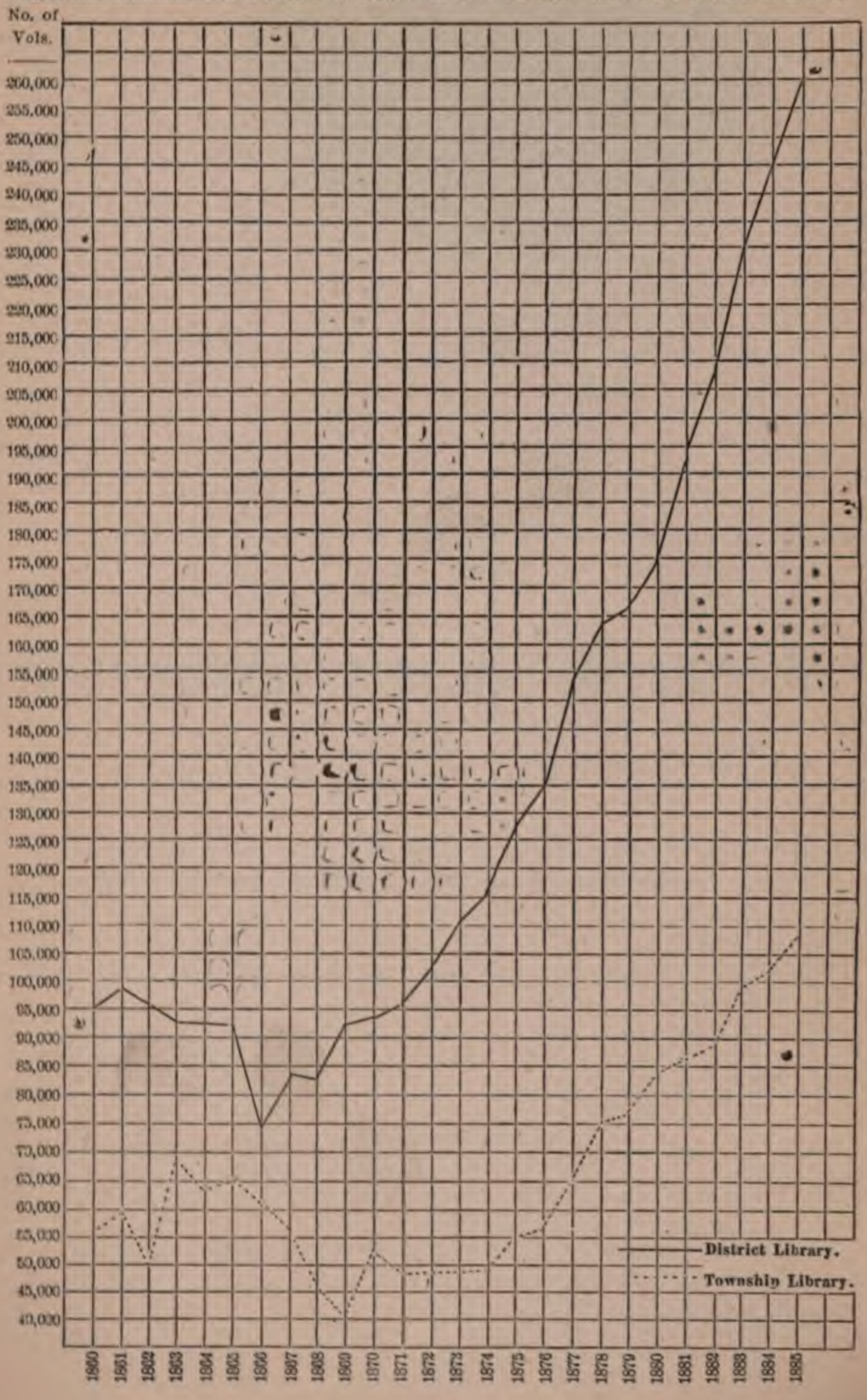


DIAGRAM III.

SHOWING THE RELATIVE GROWTH OF TOWNSHIP AND DISTRICT LIBRARIES FROM 1861 TO 1885.



ANNUAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION

FOR 1885.

ANNUAL REPORT.

It is well understood that the Department of School Superintendence exists for the administration of school laws, and not for the making of them. So of educational forms and methods which are not strictly matters of legislation, yet are well approved and established by the authority of tradition and experience. It is not necessary to regard with superstitious awe whatever has the sanction of age, and so close the mind against every new idea and foredoom every experiment. But to challenge cavalierly, and, without well-considered and weighty reasons, to change radically, systems of instruction which embody the thought and experience of many generations, is equally unwise. Doubtless school organizations may be improved, methods of teaching may be perfected; yet true progress is not, perforce, revolutionary. It is oftener that into the branches of established institutions and methods, there are ingrafted scions the same, or similar in kind, but more fruitful and of a finer quality of fruit. It is not impossible that, in educational, as in other matters, the desire for change may become a morbid and enervating, rather than a healthy and invigorating sentiment. Every effort aimed at improvement, at more effective methods and nobler results, is certainly laudable, yet it must be borne in mind that mere change is not necessarily progress. The old saw about "no royal road to learning" expresses a truth which the boldest and most original experiments tend only to confirm. Invention and tact on the part of the teacher cannot do vicariously the rugged work of the pupil. Likewise, the teacher's noblest efficiency, now as heretofore, will be found in the influence of those profound inherent and cultured personal qualities whose place the most skillful inventions touching forms and methods, can never supply.

I disclaim any purpose to disparage what has been called "The New Education." Nor do I regard myself set for the defense of its venerable antithesis: that is to say, the Old Education. But whatever my private views upon the subject of changes looking to improvement and true progress, I have come too recently to my present official relations to the Public Schools of Michigan to attempt anything unique or novel. I owe it to my immediate predecessor, as well as to several able educators who have administered the affairs of this Department, to say that I entered upon a work already admirably organized. The volume to which these remarks are only a sort of introduction, contains the current record and statistical history of the schools of our State. To the intelligent and patriotic citizen, the exhibit, as a whole, will be most gratifying. To assert that our schools have the singular merit of being the best in the world is a too flagrant self-conviction either of disingenuousness, or of ignorance. Whichever the frailty, the absurdity of the boast is patent enough. Happily for other States of this Union, happily, also, for our own benevolent wishes for our countrymen and for mankind, we have no legitimate reasons for making any such claim. It is enough to know that our common schools and schools of higher learning have taken rank with the best in the world; that for example, our great University has a reputation and influence far outreaching the most casual and imperfect knowledge that the State of Michigan so much as exists. Hence, we have a right to feel that our lines have fallen in pleasant places,—that our lot is cast in an enlightened age, and in a progressive and prosperous commonwealth.

EXAMINATION AND SUPERVISION.

The Grand Monarch said, "I am the State." He meant it in the unnatural and despotic sense which reckons the life, liberty and happiness of the millions, the absolute possession of the one. Yet in a nobler sense, and in a sense adapted to the freest nations and the most enlightened times, he uttered a deep psychological truth. The teacher is the school—Arnold was greater than Rugby. Arnold made Rugby and not Rugby Arnold. Every great school of learning has felt at some period, and holds as an everlasting memory, the imperial influence of some such mind. How much, then, is at stake in the act of choosing a teacher, and how great the responsibility in giving to any applicant a commission to teach. It is quite impossible to frame a system of examination that shall provide against imposition, incapacity and failure. The intellectual powers of the candidate may be proved, the morals and manners in a fair degree ascertained; yet there may be some capital fault—some fatal defect which eludes the scrutiny of the wisest and most experienced Examining Board. Hence the necessity of an intelligent inspection of the every day school work of the teacher. This is really the only infallible test of merit. Of course, inexperienced teachers must be licensed subject to this superior and final test. It goes without saying that both Examiners and Inspectors, though holding distinct offices, should so recognize the unity of their work as to act in complete sympathy and concord.

TEACHERS' INSTITUTES.

The enrollment has been larger than that of any preceding year,—in total showing an attendance of 7,090. I regret to say that many teachers, (and doubtless those who have greatest need of such instruction), neglect to attend these Institutes. Of the 7,090 total enrollment, only 5,023 were actually engaged in teaching. Yet, last year, 15,358 teachers were employed in the State. A glance at the figures will show that not one-third of this number reported at the Institutes. Why was this so? Was it because the two-thirds who absented themselves could afford to neglect or despise the information and training given at a Teachers' Institute ?

The statistics answer this question more effectively than I can answer it. Of those teachers holding State or Normal certificates, there was an attendance of fifty per cent. ; of those holding first grade certificates, seventy per cent. ; second grade, forty-five per cent. ; third grade, forty-six per cent. These figures are very suggestive. They show that the teachers who neglect these Institutes do not belong to the class who can best afford to neglect them. Why do the holders of second and third grade certificates show such indifference to a great privilege which is brought to their very door ? These Institutes are generally first-class professional schools. I cannot say that all whom I have appointed to conduct Institutes were eminently qualified for their work; yet it has been my aim to assign to every Institute, at least one educator of high rank and of recognized experience. I think it my duty to call the attention of Examining Boards to this matter. Why not oftener require teachers to show some substantial proof of the information they have obtained by attendance upon the Institutes, and if such proof is satisfactory, give them due credit? Why not occasionally ask for their note-books, or require other evidence that they have made a wise use of their opportunity?

Now in respect to the Institutes and to the character and qualifications of those appointed to conduct them, I have something further to submit. Undoubtedly some mistakes have been made, nor can any human foresight prevent mistakes. But, as a rule, persons best qualified to judge of their value, have spoken well of our Institutes. Indeed, the Department has received many words of commendation and few of complaint. Up to the present time it has been found necessary to give in these Institutes much academical as well as professional instruction;—to teach facts as well as philosophies and methods. It is clear to me, however, that, as soon as may be, the persons for whose especial benefit these Institutes are held, should prepare themselves to dispense with the more primary instruction,—with that which is purely academical, and that may be obtained in any of our more advanced schools,—and should be ready to grapple with the great principles and laws which govern and determine the mind and thought of all rational beings.

SCHOOL LAW.

The edition of the General School Laws compiled in 1881 having been exhausted, a new edition was issued and distributed to the several school officers of the State in December last. To facilitate comparison and reference it was deemed best to retain the general arrangement adopted in the previous compilation, incorporating in the text the amendments passed at the legislative sessions of 1883 and 1885. A digest of the decisions of the Supreme Court relating to school law which have been filed since 1881 was added.

The Legislature of 1885 made but few changes in the school law. Most of the amendments adopted simply removed some ambiguity in existing sections. The most important change was the passage of the act providing for the semi-annual apportionment of the Primary School Interest Fund. The change seems to meet with very general approval, and is of special advantage to the poorer districts. Some confusion has arisen from the inconsistency of the provisions of section 4, chapter I., and section 11, chapter IV., of the General School Laws. The former provides that the Superintendent of Public Instruction shall base the apportionment upon the school census for the school year closing prior to the *May* apportionment, while the latter section requires the Township Clerk to apportion the fund to the several districts upon the basis of the school census for the *school year last closed.* These conflicting sections should be made to harmonize.

The provisions of section 6, Act No. 144, Session Laws of 1883, which restricted the establishment of ungraded schools to cities and villages having a population of five thousand and upwards, was amended by extending this power to all municipalities maintaining a graded school. The above mentioned act, known as the Compulsory Education Act, was amended in other minor details, and additional provisions restricting the employment of children were enacted. All existing legal provisions relating to the compulsory education of children are embodied in chapters XX., XXI. and XXII. of the latest compilation of the General School Laws.

It is a matter of regret that the bills considered at the last session of the Legislature providing for the adoption of the township district system, and for uniting the offices of examiner and inspector, failed to pass. The original draft of the bill providing for the consolidation of the several districts in each township, involved almost a complete revision of the school laws, and it was scarcely to be expected that such radical changes could be brought about without more mature consideration than the members were able to give the subject during the session. The advantages that would inure to the district schools by changing to the township system have been fully set forth in the reports of my predecessor, and it is not necessary to reiterate them here. I am entirely satisfied that the abolition of the present district system would tend to elevate the character and increase the efficiency of our country schools. I sincerely hope the question may meet with favorable consideration at the next session of the Legislature.

SUPREME COURT DECISIONS.

No opinions involving questions of school law were filed by the Supreme Court during 1885. The fact that for the past two years no cases growing out of disputes upon questions of school law have come before the court of last resort in this State, is worthy of consideration as indicating a growing tendency on the part of school officers to avoid litigation in the performance of their official duties.

GEOLOGY AS AN ELEMENT IN EARLY EDUCATION.

I entertain the conviction that some of the natural sciences, and especially geology and botany, have attained a stage of development and usefulness which entitles them to a place in elementary education. I have thought it well, therefore, to offer a few considerations addressed to the people, and especially the teachers, of the State, with the view of turning their attention toward this question, and inducing them, if possible, to unite in an effort to disseminate an elementary knowledge of these subjects.

We sometimes find the opinion expressed that the "ologies" have no proper place in a system of free public education. They are variously characterized as ornamental studies, as having little practical value, as being technical and difficult of acquisition; and geology particularly is reproached as a mass of shifting theories. I am fully persuaded that all these accusations arise from misapprehension; and misapprehensions are fostered by lack of knowledge. I feel that teachers and pupils and parents may be confidently assured that the natural sciences are most fruitful in utility, cultural in their influence, easy and delightful in acquisition, when judiciously presented, and worthy to constitute a staple part of the curriculum for elementary education. Why, then, have they not found their way into schools of elementary instruction?

1. *It is objected that the science is technical, difficult and dry,* and, however valuable, should be postponed to more advanced stages of education, or even to the college course. But it is not necessary that all departments and all ranges of the science should be taught together. The foundation and materials of geology consist in its facts. These are accessible and intelligible to everybody. They lie everywhere—in the familiar pebble and bowlder, in the meadow stained with the sediment of the recent overflow, in the picturesque chasm, the sheets of strata in the quarry, the slopes of the valley, the rounded bosses of the hills. These are things not difficult to find, not difficult to comprehend; but these very things—these most familiar things—are the most fundamental facts of geology. These are data of observation, and suited to the perceptive stage of mental development. These are the very things by which the boy's attention is attracted and interested. How fortunate that the things which the boy loves are the genuine data of a grand science. Does not this proclivity and aptitude of childhood afford a hint of the direction which early education should take? Now, let the primary course be confined to the observation and study of facts. Let the technicalities and abstrusities remain unmentioned.

By and by a different presentation of the subject should follow. The pupil has a basis of facts and an inkling of principles. He is now eager for a fuller and more systematic statement of principles. We come here to the point where most of our text-books begin. By enunciating in abstract terms, principles, the grounds of which are not understood, the books have made the subject dry and difficult. There is a better way, and a more natural one. Let the *systematic* study come in a later course.

2. *It is objected that no room exists for geology in our school courses;* the time is preoccupied by other studies. That of course is implied in the existence of a full curriculum. The question, then, to consider is, whether none of the time spent on other subjects could be more usefully spent on geology. How many months are devoted to mental arithmetic, to vulgar fractions, to denominate numbers, duodecimals and "double position;" to the abstractions of grammar; to capes along some distant or thinly populated coast, to boundaries of barbaric nationalities, and other matters which, though not useless, may be postponed without serious loss. On the contrary, how neglected are the soil on which we tread, the stones of which we build, the mountains which command our veneration; the sources of the metals

which supply our civilization; the methods of Infinite Intelligence in the history of continents and oceans and worlds. Might not a few weeks be spared for the acquisition of the elements of knowledge on these geological themes—especially as the aptitudes of youth turn them toward these themes, and revolt at the burdens laid on memory and attention and abstraction by the other too familiar exactions of the school-room? I venture to think the subject should be considered.

3. *Geology is not required for admission to the University,* and all the energies of the school are bent on studies preparatory for the University. Yet geology is an elective preparatory study, and when taken, serves as well as any other preparatory for certain courses. If, then, it is a subject of commanding interest, it should be pursued in school both because it is such, and because it avails for admission to the University.

4. Another objection urges that *Few Teachers are fitted to give instruction in geology.* So, past neglect becomes the apology for present neglect. When will we have fit teachers, if geology is not taught in the schools where teachers are fitted in other things? If our teachers were all graduates of the Normal School or the University, and students in those institutions were required to pursue geology, then the difficulty would be removed. But not a tenth part of our teachers are such graduates; and not even are those studying in the University required to take geology. I am told that not over one-sixth of all students in the Literary Department pursue geology in any one year; and a majority of these are not qualifying for teachers, because the schools demand chiefly, literary, mathematical and linguistic preparation, so the introduction of geology in the schools is not greatly promoted by the University.

But a large majority of our elementary teachers is supplied by the high schools and district schools; and as this will continue to be the case, there is no hope for geologically qualified teachers as a rule. How, then, is it practicable to introduce the subject in elementary schools as it deserves? The remedy must be one applicable to the great body of teachers *as they are.*

I think I discover a remedy, under two forms. In the *first place,* I find text books recently planned expressly for use by teachers who have had no geological training; and I have testimony from superintendents and from teachers who have used them, that it is a practicable thing for unqualified teachers to guide students successfully through an elementary course in geology. In the *second place,* I think our State and county institutes may be made the means of supplying some degree of qualification to our elementary teachers. I believe that competent persons can be induced to unfold the subject at gatherings of teachers, and illustrate by example, the methods which the teacher may employ in the school-room and the field. Thus, by which supply our civilization; the methods of Infinite Intelligence in the degrees, a better grade of qualifications will come into exercise. Geology will become one of the common branches of education. Students will enter the University, if they please, in possession of a knowledge of the elements; and their University course will afford them advancements, as it should, beyond the mere elementary stage.

STATE TEACHERS' READING CIRCLE.

The movement looking toward organized effort for the self-improvement of the teachers of the State by home reading and study was inaugurated by the organization of the State Teachers' Reading Circle during the early part of the year.

A provisional committee was appointed by the State Teachers' Association at its meeting in December, 1884, with instructions to report a scheme of organization, to be submitted to the State Teachers' Institute to be held in July, 1885. The full text of this report will be found in connection with the proceedings of the State Teachers' Association. The State institute not having been called, the committee, feeling the necessity of prompt action, arranged a plan of organization which was at once adopted by several counties in the State, and which was ratified and made a permanent organization by the State Teachers' Association in December, 1885.

The method of organization is briefly set forth in the report of the provisional committee as follows:

> 1. We advise that the general management of the Reading Circles of this State be vested in a State Council consisting of the Superintendent of Public Instruction, *ex officio*, and four members to be elected by this body, two at each annual meeting. Of the four members to be elected at this meeting, two are to hold office for two years, and two for one year. This State Council of five shall organize by the election of a President, a Secretary, and a Treasurer, shall make all necessary laws and rules for carrying into effect the policy of this Association, and shall make an annual report to this body.
>
> 2. We advise the continuance of the present system of county organization, viz: A Board of five members, one of whom shall be the Secretary of the County Board of Examiners, the four other members in the first instance being appointed by the State Council from a list of six candidates nominated by the Secretary of the Board of Examiners, and after the first organization two new members to be appointed each year in the same manner as before.

Under this simple organization, a course of study was arranged, text-books elected and reduced prices obtained from publishers. A State depository located at Lansing, details of work arranged, and active work begun.

e course of study adopted is as follows:

FIRST YEAR.

a. Professional: Page's *Theory and Practice of Teaching.*
b. History: Barnes's *General History* to p. 312.
c. Literature: Swinton's *Studies in English Literature,* with supplementary reading.

SECOND YEAR.

a. Professional: Putnam's *Outlines of Theory and Art of Teaching.*
b. History: Barnes's *General History,* completed.
c. Literature: *Swinton's Studies in English Literature,* completed.

THIRD YEAR.

a. Professional: Bain's *Education as a Science.*
b. Psychology: Haven's *Mental Philosophy.*
c. History of Education: Compayré's *History of Pedagogy.*

Laurie's *Life of Comenius* is adopted as supplementary reading in any part of the course where there may be leisure for it.

d. (The following reference books are recommended to members of the Circle: A Dictionary; an Atlas of Ancient and Modern Geography; either the *Dictionary of Education and Instruction,* or *Cyclopædia of Education,* and *The Power and Authority of School Officers and Teachers.*)

The movement has the hearty and unanimous support of the prominent educators of the State, and has met with great favor from such teachers as are acquainted with it.

The work of the Circle has received recognition from the State Board of Education in the preparation of examination questions for county examinations, the questions being partially based upon the texts adopted in the course of study. The disposition for self-improvement evinced by members of the Circle is entitled to recognition by examining boards and officers, and in many counties of the State the County Board of Examiners consider the fact of membership in the Circle in examining applicants for certificates. The general tendency to give the Circle official recognition is suggested in the action taken at the last meeting of County School Examiners, at Lansing, by the adoption of the following recommendation,—"That for work done in the State Teachers' Reading Circle by an applicant for a certificate and accepted by the Central Committee, the examiners add at least one per cent. to the general average for each book read or part of the work so done." Such aid and encouragement as this Department has been able to extend has been cheerfully rendered, and it is hoped that the organization may continue to receive the attention which its importance demands, and that it may grow in popularity and favor until every teacher in the State shall feel its helpful influence.

EDUCATIONAL FUNDS.

THE PRIMARY SCHOOL FUNDS.

The moneys derived from the sale of school lands, and from escheats to the State, constitute the Primary School Fund *proper,* and bear seven per cent. interest. One-half the cash avails of the sale of swamp lands are also set apart as a school fund, bearing five per cent. interest, and this is called the Primary School five per cent. Fund. The income derived from each of these funds, together with the surplus of specific taxes remaining in the State treasury, after paying the interest on the several educational funds, and the interest and principal of the State debt, forms the Primary School Interest Fund; the entire amount of which, that may be on hand at the time, is apportioned to the school districts of the State semi-annually between the first and tenth days of May and November in each year.

The condition of these funds for the fiscal year ending September 30, 1885, is shown in the following statement:

Primary School seven per cent. Fund:		
In the hands of the State	$3,184,190 09	
Due from purchasers of lands	293,155 61	
Total seven per cent. Fund		$3,477,345 70
Primary School five per cent. Fund:		
In the hands of the State	$361,382 57	
Total five per cent. Fund		$361,382 57
Total School Funds		$3,838,728 27

PRIMARY SCHOOL INTEREST FUND.

Interest paid by the State on 7 % Fund	$220,389 56	
Interest paid by holders of lands 7 % Fund	22,443 21	
Total interest on 7 % Fund		$242,832 77
Interest paid by the State on 5 % Fund		18,000 55
Total income from both Funds		$260,833 32
Surplus of specific taxes transferred		507,892 36
Rent of land		1 00
Paid by trespassers on school lands		357 00
Total Primary School Interest Fund		$769,083 68

THE UNIVERSITY FUND.

This Fund is derived from the sale of lands granted to the State by the General Government for the support of a university, and draws interest at seven per cent. The amount to the credit of this Fund, September 30, 1885, together with the income derived from the same, is as follows:

In the hands of the State	$497,378 78
Due from purchasers of lands	47,444 40
Total Fund	$544,823 18
Interest paid by the State	$34,755 82
Interest paid by holders of lands	3,780 98
Total income	$38,536 80

THE AGRICULTURAL COLLEGE FUND.

This Fund, derived from the sale of lands granted by the State and by the General Government for the support of the College, draws seven per cent. interest. The state of the Fund at the close of the last fiscal year was as follows:

In the hands of the State	$284,788 27
Due from purchasers of lands	42,999 62

ERRATUM.

On page XXI, in statement of Agricultural College Fund, the amount due from purchasers of lands should be $142,999.62 instead of $42,999.62, making the total Fund $427,787.89.

This Fund, bearing six per cent. interest, is derived from the sale of salt spring lands, granted by the State for the support of a normal school. The condition of this Fund and its income at the close of the fiscal year was as follows:

In the hands of the State	$61,784 81
Due from purchasers of lands	7,341 23
Total Fund	$69,126 04

Interest paid by the State	$3,690 38
Interest paid by holders of lands	597 47
Total income	$ 4,287 85

STATE INSTITUTIONS.

THE UNIVERSITY.

The past year, while not marked by any radical change in the courses of study or methods of instruction, has been a prosperous one for the University. The most important changes in the faculties have been occasioned by the retirement of Hon. James V. Campbell from the faculty of the Law Department, and of Prof. C. K. Adams and Prof. C. K. Wead from the chairs so acceptably filled by them in the Literary Department. Judge Campbell has been officially connected with the University since its opening in 1841, and was appointed Marshall Professor of Law in 1859, the year the Law Department was organized. His eminent scholarship, kindly interest in the students and constant loyalty to the University, will always be cherished by the faculties and *alumni* of all departments. Dr. Adam's retires to accept the more responsible trust of President of Cornell University. He has been a member of the faculty of the Literary Department for a quarter of a century, and since 1867 has filled the chair of History, by a peculiar coincidence succeeding Prof. Andrew D. White, who also preceded him as President of Cornell.

The vacancies above noted are all filled temporarily. Judge Thomas M. Cooley supplies the chair of History, and Mr. J. C. Knowlton and Professor Harrington, both graduates of the University, succeed Judge Campbell and Professor Wead respectively.

The facilities for shop work in the Engineering Department proved entirely inadequate to the demand, and at the last session of the Legislature $15,000 was appropriated to erect a new building, and procure additional machinery. The enlarged accommodations made possible by this appropriation will scarcely more than meet the present needs of the several courses in engineering. The question to what extent manual training should be given in the University is an important one, and I think President Angell wisely assumes that it should be confined to the needs of the students in civil, mechanical and mining engineering. The present limited facilities necessitate such restriction, and the recent establishment of a department of Mechanic Arts at the Agricultural College, affords ample opportunity for students seeking instruction in elementary mathematics, the use of tools, and practical training in such branches as are necessary to fit them for skilled mechanics.

The number of students in the several departments during the year was as follows:

Literary Department	524
Medical Department	334
Law Department	262
School of Pharmacy	61
Homeopathic Medical College	34
Dental School	80
Total	1,295

This shows a decrease over the previous year of 15 in the Literary Department, 43 in the Law Department, 16 in the School of Pharmacy, and 23 in the Homeopathic Medical College. In the Medical Department and Dental School there was an increased attendance of 2 and 13 respectively, leaving a decrease of 82 in the total enrollment. The decline in attendance is chiefly in the number of students from other states, and is undoubtedly attributable, as stated in the report of the President, to the improvements in the character of the State Universities in other states. The slight falling off in the attendance of Michigan students can be attributed to the stringency of the times.

At the last commencement 363 degrees were conferred upon graduates in the several departments as follows:

Literary Department	87
Medical Department	80
Law Department	136
School of Pharmacy	26
Homeopathic Medical College	6
Dental College	28

During the past year the University has received more valuable bequests than during any other one year of its history. The munificent gift to the Art Museum of the Lewis Art Gallery, noted in the last report of this Department, has been supplemented by the presentation by the eminent sculptor, Randolph Rogers, of a complete collection of the original models and casts of his works. The value of this collection to students of art can scarcely be overestimated. In these two gifts of the Lewis and Rogers collections, the Museum of Art is enlarged beyond the present facilities for safe preservation and proper exhibition. A building or series of rooms devoted exclusively to the collections of art is almost indispensable.

The number of volumes in the law library has been more than doubled by the gift of five thousand volumes from Mr. C. H. Buhl, of Detroit; and the exhibit made by the Chinese Empire at the New Orleans Exhibition, which was secured to the University through the efforts of President Angell, is a most important addition to the ethnological collection.

These, and other gifts which are acknowledged in the report of the President, testify to the high standing this institution has attained, and the confidence felt in its future growth and power.

As usual, the requests of the Board of Regents to the Legislature were given a generous consideration, the appropriations aggregating $56,000 for 1885, and $51,500 for 1886. It is to be regretted that the bill increasing the one-twentieth mill tax to one-tenth of a mill failed to pass the House. If the University is ever to reach its highest possibilities, the available funds at the command of the Regents must be materially increased, and the method proposed in the bill above mentioned seems to be the most feasible plan for securing this addition.

There have been added to the several libraries during the year 2,246 volumes and 1,054 pamphlets, exclusive of the Buhl gift to the law library. The total number of volumes accessible to the students of the different departments is 56,091. That the advantages of the library facilities are appreciated by the students is shown by the fact that 89,388 volumes were drawn during the year. The appropriation of $5,000 a year for the succeeding two years for the purchase of books insures a still further increase in the facilities for original research, so essential to a thorough university training.

The report of the President, included in the documentary portion of this report, gives a comprehensive review of the condition of the several departments, and its perusal cannot fail to strengthen the pride that every citizen of the State should feel in the University.

THE AGRICULTURAL COLLEGE.

Many important changes in the faculty and courses of study of this institution, and enlarged facilities for technical instruction are noted. The vacancy in the presidency, caused by the retirement of Dr. T. C. Abbot, after a faithful service of nearly a quarter of a century, has been filled by the appointment of Hon. Edwin Willits. The State Board of Agriculture could not have selected for this important trust a gentleman whose appointment would have given more general satisfaction to the friends of the College. No one familiar with Mr. Willits's successful administration of the office of Principal of the State Normal School during the past year, which position he resigned to accept the presidency of the College, will question the wisdom of the Board in their selection of Dr. Abbot's successor.

The liberal appropriation to the College by the last Legislature has enabled the Board to make many needed permanent improvements. Three substantial buildings have been erected, one for the newly established course in the mechanic arts, a laboratory and lecture room for the Veterinary Department and a drill hall. The plan of having each department of instruction separate and distinct from the others as far as the appliances for special teaching and practical illustration are concerned is a distinctive feature of this institution. The departments of Chemistry, Physiology, Botany, Physics, etc., each has its special lecture room, laboratory and museum, thus affording the best of facilities for practically illustrating the topics under consideration in the class. By this system instruction in the various sciences and in Mechanics is conducted largely by experiments, both by the instructor and the students themselves.

The establishment of a Department of Mechanic Arts is a most important addition to the courses of study. The legislative appropriation of $17,000 for the erection and equipment of a building for shop work, has enabled the Board to receive students in this course. It is anticipated that this beginning may be the nucleus of what shall develop into a well appointed and fully equipped school of Technology. The demand for a special school combining shop work with a thorough course of instruction in the principles of those sciences which are essential to an intelligent understanding of the various industrial pursuits, is constantly growing, and the establishment of this department supplies a place in the educational system of the State not previously filled. The Mechanical Department of the University is essentially, for the present at least, an adjunct to the several courses in engineering, and does not include as elementary work as is covered by the corresponding course at the Agricultural College. The latter course includes instruction in the use of tools and the construction of mechanical products, practice in free-hand drawing and draughting, with special instruction in the English language, book-keeping and business law.

The general library contains about seven thousand volumes, and each department of instruction is supplied with a limited number of special works of reference. The library is especially rich in scientific works, and current publications and periodicals giving the latest investigations in the arts and sciences are being constantly added. The various museums are well supplied with material for illustration in the special departments, and are being continually enlarged and improved.

The experiments which are constantly being made in the various departments have proved of great value to the agricultural interests of the State, and the importance of disseminating the information derived from these experiments among the farmers and horticulturists of the State was recognized by the Legislature by the passage of an act requiring the publication in bulletin form and in the newspapers of the State, of the results of the experiments made in the different departments.

If the bill now pending before Congress, providing for the establishment of experimental stations at all agricultural colleges, should pass, the facilities for extending the investigations would be materially increased.

The report of the Secretary of the State Board of Agriculture and the inaugural address of President Willits, which are published in the documentary part of this report, contain full information regarding the present condition and future possibilities of this institution.

NORMAL SCHOOL.

Notwithstanding the business depression of the past year which has resulted in a marked decrease in attendance at most of the educational institutions in the State, the enrollment at the Normal school shows an increase of 45 in the Normal department. This constant increase in attendance demands enlarged accommodations and more instructors. These are questions of great importance, and the next Legislature must make provisions for enlarged accommodations at Ypsilanti, or provide for the establishment of another Normal school if the State purposes furnishing professional instruction to all teachers seeking it. The rooms are already crowded beyond their capacity and the classes are much too large to allow of that personal attention that is so necessary to the best results in class work. Principal Willits lays great stress upon these matters, and I sincerely hope that his recommendations may be given careful consideration by the Legislature.

During the year Principal Willits resigned to accept the presidency of the Agricultural College. His two years' administration of the Normal school has demonstrated his eminent fitness for the position to which he was called by the State Board of Education and gives ample assurance of still greater success in the larger field to which he has been called. The vacancy caused by Mr. Willits's retirement has not as yet been permanently filled. Professor Daniel Putnam has been appointed acting principal, a position which he admirably sustains.

A number of important changes have taken place in the faculty which are noted in the Report of the Board. The total number of instructors employed during the year was twenty.

The Board of Visitors in their report upon the condition of the Normal school, question the propriety of devoting so much time to academic work. Theoretically the work of this school should be largely professional, and it is the policy of the Board to restrict instruction in the elementary branches as much as possible. A marked improvement in the character of the school in this respect was made two years ago when the applicants for admission were required to pass a thorough examination in the common school branches. That this step has been productive of excellent results is apparent from the following extract from the report of Principal Willits: "It is manifest to all observers that a decided advance has been made in the professional, as distinguished from the academic work of the school. Perhaps the theory of the work has not been changed, so much as the practice. The training school has been more exacting, systematic and positive. The students have been made to see more clearly that the 'professional work' was the culmination of the labors and acquirements of the school; that but for that, the school had no legitimate right to exist. Teachers and students have loyally held this in view, and under this impulse there has been marked progress. The change of the training school from the forenoon to the afternoon was of marked benefit, in that the seniors, to whom the instruction is assigned, have been able to give an undivided attention to the subject of practical teaching, without the distraction of their own recitations during intervening hours. It is manifest that still further improvements may be attained if the last year shall be wholly devoted to professional work, or if the academic work shall be more largely excluded from the labors of the last year, leaving, if any at all, only those studies which relate to facility in imparting knowledge as distinguished from acquiring it. The study of mental processes, skill in lucid expression, facility in illustration, self possession, self-reliance, should be the chief work of the last year besides the practice in the training school."

The school work during the year has been eminently satisfactory. All the instructors have labored faithfully and the students have evinced an earnestness of purpose indicative of a full appreciation of the importance of thorough preparation to success in the profession of teaching.

A detailed review of the work of the school during the year is given in the report of the Principal.

STATE REFORMATORY AND CHARITABLE INSTITUTIONS.

The annual report to this Department, required by section 2, Act No. 206, Laws of 1881, has not been received from the Deaf and Dumb Institution, the School for the Blind, the Reform School, or the Industrial Home for Girls. No changes of importance, to my knowledge, have been made in the educational features of any of these institutions. It continues to be the policy of the several Boards of Control, to extend instruction in the industries as far as is practicable, to meet the various tastes and capacities of the inmates, so as to best fit them for performing the duties of citizenship. The last Legislature made ample provision for the support of these schools, and their management continues to command the confidence of the people and to reflect credit upon the State.

The report of Supt. Foster of the State Public School, gives assurance that the educational needs of the little waifs who are here temporarily provided with a home, are carefully considered. The establishment of a Kindergarten department during the past year, has proved to be a most important adjunct to the school work. One of the cottages has been arranged as a school-house and the children here have as pleasant and comfortable recitation rooms as are furnished pupils in the public schools.

The instruction is necessarily confined to the primary branches, owing to the fact that the children remain at the school such a short time, but great care is taken to provide for their continued attendance at school after leaving the institution, by making such attendance a condition of their indenture. When we remember that since the establishment of this school, nearly 1,400 children have been taken from the streets or from homes where all the surroundings were bad, and placed in comfortable homes where they have every opportunity and inducement to become good men and women, we but partially understand the grand work that this public charity is doing for humanity and for the State.

INCORPORATED INSTITUTIONS.

The reports received from the various incorporated educational institutions show that the past year has been an unusually favorable one.

The fourteen institutions from which reports have been received show an aggregate attendance of 3,250 students, an increase over the attendance for 1884 of 421, or nearly fifteen per cent. During the year the total indebtedness was reduced over $12,000, and $20,000 were expended in permanent improvements. These facts indicate a remarkably prosperous year both in the financial condition and increased patronage.

The denominational colleges and unsectarian incorporated schools, with an average attendance of over 200 students, are important factors in the educational system of the State. Some of them are exceptionally well equipped with libraries, museums, and laboratories, while the instructors are, with scarcely an exception, thorough students and earnest, conscientious teachers. These institutions occupy a field between the public high schools and the University, Agricultural College and Normal School, and attract many students who for various reasons would not attend either of the last named institutions. They are engaged in a most important work and their growth and prosperity is of no small moment to the general public.

The following brief review of the present condition of these schools shows continued improvement in the methods and means of instruction, and that with very few exceptions, they are doing good work.

ADRIAN COLLEGE.

In no other institution in the State, with the possible exception of the University, is the student allowed greater freedom in the choice of studies than at this school. The elective system has been followed for the past ten years, and the result has been added interest and zeal on the part of the students, without in the least diminishing the thoroughness of the work done.

A systematic effort is being made to increase the amount of productive funds which at present amounts to $80,000, while the value of the non-productive property of the institution—buildings, museums, library, etc., is $220,000. It is to be hoped that the efforts of the friends of the college to materially enlarge the endowment fund, may be successful, as lack of available means has proved the chief obstacle to the highest progress of the institution.

The museum of natural history is quite large, the chemical and physical laboratories are fairly well equipped, and the library, though not large, contains a choice collection of standard works of reference.

The number of students in attendance during the year was 186, an increase of twelve over the previous year.

ALBION COLLEGE.

President Fiske reports a year of prosperity and profitable work. The indebtedness of the college has been reduced nearly $9,000, while many important improvements and additions have been made to the library, laboratories, etc. During the year 698 volumes were added to the library, which now numbers about 5,000 volumes. The biological laboratory has been improved by the addition of a number of compound microscopes, and is quite well supplied with needed facilities for conducting experiments in this department. The museum is conveniently arranged to facilitate the study of natural history, and the college is more than ordinarily well supplied with appliances for original investigation in the several branches of study.

What is denominated the "new movement" in the arrangement of the order of studies in the different departments, continues to grow in favor with the faculty and patrons of this institution. This system involves a radical change in the established method of studying history and the languages. The student first enters upon the study of modern history and the modern languages, ancient history and the classics coming in the later years of the course. While fully satisfied with results that have thus far followed the adoption of this system, President Fiske concedes that a perfectly satisfactory test of its value cannot be obtained until some classes have passed through the entire course.

Besides the regular college courses, the Art Department offers superior advantages for instruction in music and painting. One hundred and forty-six students were enrolled in this department during the year. The total attendance in all the departments was three hundred and twenty-five, a slight decrease from the previous year.

BATTLE CREEK COLLEGE.

During the past year Professor W. H. Littlejohn retired from the presidency of this institution and was succeeded by Professor W. W. Prescott. With the new administration many important changes have been inaugurated in the courses of study, by which the character of the instruction given has been materially raised. The curriculum of study now includes full classical, scientific and English courses. Four hundred and twenty students were enrolled, and the present accommodations of the college were so crowded that it was deemed necessary to enlarge the buildings, and the society propose to raise $50,000 by subscription for this purpose. The faculty numbers twenty-four, including the instructors in the several trades taught in the department of Manual Training.

DETROIT COLLEGE.

The attendance at this institution has increased so rapidly that larger accommodations were demanded, and a building was purchased nearly opposite the main structure, which has been fitted up for the use of the students in the more advanced courses. The instruction given is very thorough, especially in the classics, history and rhetoric. Particular attention is given to elocution, and the students of Detroit College are more than ordinarily proficient in oratory. The discipline is quite rigid and the examinations very thorough. During the year the indebtedness has been materially reduced, and the President reports a very prosperous year, in increased attendance, valuable additions to the museum and library, and in the excellent work done by the students in the several departments.

HILLSDALE COLLEGE.

As usual the attendance at this institution exceeded that of any of the incorporated schools in the State, the total enrollment in all the departments reaching 650. The college proper includes five departments—Academic, Theological, Music, Art and Commercial. The college is entirely free from debt, has an endowment fund of about $140,000, yielding an annual income of nearly $10,000. This amount, together with the receipts from tuition fees and scholarships, more than meets the current expenses. This satisfactory condition of the finances of the college has been attained by exercising the most rigid economy in expenditures and by the unselfish and self-sacrificing devotion of the instructors. This subordinating of personal interests to the interests of the institution with which they are connected, is characteristic of a majority of the instructors in most of the denominational schools. As a rule the salaries paid are not at all commensurate with the work done, and the services of many of these gentlemen are retained because a fine sense of duty outweighs, with them, personal considerations.

Hillsdale College is well provided with necessary accessories for successfully pursuing the various courses of study. The library contains 8,000 volumes; the chemical and biological laboratories are well equipped, and the museum quite complete. The Academic Department includes a full classical, scientific, and normal course. The arrangement of studies and the text books used are given in the report of the President.

HOPE COLLEGE.

During the year the college lost one of its buildings by fire, but an effort is being made to raise $15,000 to erect a more commodious and better arranged building. The attendance shows a slight increase over the preceding year, numbering 151 in all the departments. All graduates from the academic department are required to take the full classical course, though the studies usually included in the scientific course of other colleges are embraced in the curriculum. This institution has had a hard struggle for existence in the past, but the earnest and continued efforts of its friends have at last succeeded in establishing it upon a permanent basis.

In his report of Hope College, which is published with the documents accompanying this report, President Scott assumes that many students are attracted to the professional departments of the University from the colleges of the State by reason of the laxity in the requirements for admission to these departments. This assumption involves, I believe, an unjust reflection upon the University. It has been, and still is, the policy of the authorities to increase the requirements for admission to the professional schools of the University as rapidly as practicable, and I believe that no professional school in the country requires more preliminary preparation for admission than is required of applicants for admission to the corresponding department of the University.

KALAMAZOO COLLEGE.

This institution, in common with many other colleges deriving their support from a religious denomination, has had its seasons of prosperity, and also of adversity. Without attempting to trace the efficient causes, it is sufficient to say that during the year 1885 Kalamazoo College passed a crisis second to none in its history. Never heavily endowed, dependent for a part of its support upon the yearly benefactions of those most thoroughly interested in its maintenance and prosperity, the College has found its available resources gradually diminishing during the recent years of financial depression, until it seemed necessary to close its doors. But the struggle seemed only to call forth new and stronger efforts; and now, through the financial aid and moral support of not only the citizens of Kalamazoo, but of friends throughout the State, the College is placed upon a sound financial basis, with its endowment largely increased. While the number of students is not large, the standards recognized, the character of the work done in the class-room, and the symmetry of the manhood and womanhood developed is highly spoken of by those who have taken pains to scrutinize the present working of the school and to review the history of its past.

During the past school year the nominal number of students has decreased from 204 to 161, through causes already indicated; yet other features are very encouraging. In addition to the extensive renovation and repairs within and without the upper or dormitory building, a large cottage for the accommodation of young lady students is nearly completed, which is the result of the labors of an organization of ladies known as the Kalamazoo Ladies' Hall Association.

The resignation of Rev. Kendall Brooks, D. D., in June, 1885, as President of Kalamazoo College, was accepted, to take effect in one year.

OLIVET COLLEGE.

The report of President Butterfield shows the past year to have been an unusually prosperous one. During this period Mather Hall was completed. The upper story of this building is devoted to displaying the splendid mineralogical collections embraced in the Brown cabinet and the Palmer museum. The basement contains the chemical laboratory, which is fully equipped with all necessary appliances for the practical study of chemistry. The building also contains lecture-rooms for classes in chemistry, botany, mineralogy and zoölogy; two recitation rooms; a physical laboratory and a private laboratory. The permanent fund, the income of which is applied to purchasing books for the library, has been increased to $15,000 by a bequest of $5,000. The college already has the largest and most valuable library of any educational institution in the State excepting the University, and its constant growth is assured from the annual income of the library fund.

DETROIT HOME AND DAY SCHOOL.

The success of this school has been quite remarkable. Though incorporated in 1882, it was not opened for the reception of students until 1884. The attendance the past year reached 252, and the receipts from tuition fees largely exceeded the current expenses. The school occupies a building especially erected for its use. Particular attention was given to lighting and ventilation, and the rooms are commodious and pleasantly arranged. Twelve instructors are employed. The courses of study are graded and include three courses of four years each. The school is doing excellent work and has already attained a high rank among schools of its class.

MICHIGAN MILITARY ACADEMY.

Supt. Rogers reports the past year as "the most successful one in the history of the institution." The completion of the new barracks added much to the convenience of the students, but the applications for admission still largely exceed the accommodations of the school. The beneficial effects of the military drill upon the physique and health of the cadets is very apparent, and this fact is being recognized more and more each year by parents, causing a constant increase in attendance at the Academy. The instruction is very thorough, and the graduates are admitted to the University without examination.

SOMERVILLE SCHOOL.

The design of this school is to offer to young ladies a thorough preparatory college course, although a full course of study is arranged for such as desire to finish their studies there. The academic work of the school is divided into three departments,—the College Preparatory, Belles-Lettres, and Primary. The first department includes four courses, Classical, English, Scientific, and Latin, and a diploma from either of these courses will admit the graduate to the corresponding course in the University without examination. The Belles-Lettres department is arranged for more advanced students, and comprises two years' study. This course is intended to meet the wishes of parents who desire their daughters to pursue their studies beyond the ordinary high school course, yet do not wish them to complete a full university course.

The school has an exceptionally large and well arranged Art Studio, supplied with a choice collection of models, affording excellent facilities for pursuing the study of the various branches of art. Especial attention is given to vocal and instrumental music. A departmant of Industrial Art will be established the coming year which will include instruction in needlework, cookery and the various branches of household economy.

SPRING ARBOR SEMINARY.

The charter of this school was granted in 1872, to the sect known as the Free Methodists. During the year 120 students have been enrolled, who have been in charge of five teachers. There is a growing library connected with the institution, and the students have a further advantage in the small cost of tuition and board.

In all, there are 28 who have been graduated from the Seminary since its foundation.

GERMAN AMERICAN SEMINARY.

The President reports favorably as to the interest shown to the school by the public. Four regular teachers and two assistants are employed, of whom one teacher and assistant have in charge the Kindergarten department, which is found to be of great service as preparatory to the subsequent course. The total enrollment for the year was 190.

The plan of thus bringing two modern languages into a more practical relation is a good one, and the prosperity of the school is much to be desired.

RAISIN VALLEY SEMINARY.

This school, under the control of the Society of Friends, dates the period of its existence from 1861. The work done is of high order, and the constant aim is to induce symmetry of character. The courses of instruction are well chosen in regard to the range as well as to the character of the subjects treated. Students in astronomy have great advantage in the use of a telescope of eight-inch object glass, a gift to the seminary not many years since; while those who study Physics and Chemistry have valuable aids in the apparatus provided for their use. The school is now in a prosperous condition, both in attendance and the number of young men and women who complete the courses.

MICHIGAN FEMALE SEMINARY.

The following sentence is taken from the annual circular of 1885: "As expressed in the charter the intent was 'to establish, endow, and control a seminary of learning for the education of young ladies in the higher branches of a thorough education, having reference to the entire person physically, intellectually, morally and religiously considered, and to be essentially modeled after the Mt. Holyoke Seminary in Massachusetts, founded by Mary Lyon.'"

It is but fair to say that the desire of the founders of this institution is being largely realized. In a degree conservative, the administration pursues its own regular way, commanding the respect of all who become acquainted with its methods. The course of instruction is somewhat different from that pursued in many institutions of modern and classical learning, but it is well calculated for the development of sturdy intellectual powers combined with moral sensibilities both delicate and lasting. Among the many excellent features doserving mention are the library, musical instruments, apparatus, telescope, and modern aids in the study of Physiology; all of which are of great value in supporting the course of study. Careful attention is given, also, to physical health and culture. Besides the daily exercise in light domestic work, systematic instruction is given in calisthenics, in a gymnasium well fitted to the needs of the Seminary.

CONCLUSION.

I wish to express my obligations to the teachers and school officers of the State for their kindly coöperation and the uniform courtesy that has characterized their intercourse with this Department. I should also acknowledge my appreciation of the valuable services rendered by my assistants in the Department.

Very respectfully,
THEODORE NELSON,
Superintendent of Public Instruction.

STATISTICAL TABLES.

TABLE I.

Comparative Summary of Statistics for the Years 1884 and 1885.

Items.	1884.	1885.	Increase or Decrease.
Districts and Schools.			
Number of townships and independent districts reporting	1,176	1,186	10
Number of graded school districts	437	440	3
Number of ungraded school districts	6,378	6,492	114
Total	6,815	6,932	117
School census of graded schools	266,459	279,970	13,511
School census of ungraded schools	310,604	315,782	5,178
Total	577,063	595,752	18,689
Enrollment in graded schools	174,275	179,004	4,729
Enrollment in ungraded schools	230,691	232,950	2,259
Total	404,966	411,954	6,988
Percentage of attendance in graded schools	65.4	63.9	*dec.* 1.5
Percentage of attendance in ungraded schools	74.2	73.8	*dec.* .4
Percentage for the State	70.1	69.2	*dec.* .9
Number of districts reporting having maintained school	6,728	6,880	152
Average duration of schools in months in graded schools	9.4	9.5	.1
Average duration of schools in months in ungraded schools	7.4	7.4	
Average for the State	7.6	7.1	*dec.* .5
Number of private and select schools reported	296	303	7
Number of men teachers in such schools	253	262	9
Number of women teachers in such schools	383	452	69
Estimated number of pupils attending such schools	27,130	30,458	3,328

TABLE I.—*Continued.*

Items.	1884.	1885.	Increase or Decrease.
Teachers and their Employment.			
Number of teachers necessary to supply graded schools	3,022	3,127	105
Number of teachers necessary to supply ungraded schools	6,458	6,494	36
Total	9,480	9,621	141
Number of men teachers employed in graded schools	589	697	108
Number of men teachers employed in ungraded schools	3,168	3,179	11
Total	3,757	3,876	119
Number of women teachers employed in graded schools	2,669	2,809	140
Number of women teachers employed in ungraded schools	8,834	8,673	*dec.* 161
Total	11,506	11,482	*dec.*
Whole number of teachers employed in graded schools	3,258	3,506	248
Whole number of teachers employed in ungraded schools	12,002	11,852	*dec.* 150
Total	15,260	15,358	98
Average number of months taught by men in graded schools	8.5	7.5	*dec.* 1
Average number of months taught by men in ungraded schools	4.3	4.6	.3
General average	5	5.1	.1
Average number of months taught by women in graded schools	9	9.1	.1
Average number of months taught by women in ungraded schools	3.9	4	.1
General average	5.1	5.2	.1
Total wages of male teachers in graded schools	$389,606 22	$406,529 73	$16,923 51
Total wages of male teachers in ungraded schools	498,446 85	506,824 79	8,377 94
Total	$888,053 07	$913,354 52	$25,301 45
Wages of female teachers in graded schools	$923,627 66	$1,000,414 09	$76,786 43
Wages of female teachers in ungraded schools	870,886 03	871,511 55	625 52
Total	$1,794,513 69	$1,871,925 64	$77,411 95

TABLE I.—*Continued.*

Items.	1884.	1885.	Increase or Decrease.
Aggregate wages of all teachers in graded schools	$1,313,233 88	$1,406,943 82	$93,709 94
Aggregate wages of all teachers in ungraded schools	1,369,332 88	1,378,336 34	9,003 46
Total	$2,682,566 76	$2,785,280 16	$102,713 40
Average wages of male teachers in graded schools	$77 78	$77 83	05
Average wages of male teachers in ungraded schools	36 59	34 79	*dec.* 1 80
Average wages of male teachers in all schools	$46 92	$46 17	*dec.* 75
Average wages of female teachers in graded schools	$38 11	$38 99	88
Average wages of female teachers in ungraded schools	25 25	25 34	09
Average wages of female teachers in all schools	$30 68	$31 18	50
* *Examination and Certification of Teachers.*			
Number of public examinations held	446	470	24
Number of applicants for regular certificates	12,589	13,735	1,146
Number of first grade certificates granted	155	120	*dec.* 35
Number of second grade certificates granted	540	504	*dec.* 36
Number of third grade certificates granted	8,282	9,016	734
Whole number of regular certificates granted	8,977	9,640	663
Number of applicants for special certificates	2,500	2,024	*dec.* 524
Number of special certificates granted	2,302	1,873	*dec.* 429
Number teaching who held State or Normal School certificates	297	289	*dec.* 8
Whole number legally qualified teachers	10,026	10,517	491
Number licensed without previous experience in teaching	2,342	2,178	*dec.* 164
Number of applicants who had attended the Normal School	2,704	3,231	527
Number of applicants who had attended institutes during the year	4,399	5,613	1,214
School Property.			
Number of frame school-houses	5,478	5,574	96
Number of brick school-houses	1,000	1,031	31
Number of stone school-houses	76	74	*dec.* 2
Number of log school-houses	499	485	*dec.* 14
Total	7,053	7,164	111

---

* No reports for 1885 have been received from the Secretaries of the County Boards of Delta and Muskegon counties.

TABLE I.—*Continued.*

Items.	1884.	1885.	Increase or Decrease.
Whole number of sittings in school-houses	498,859	512,659	13,800
Estimated value of property in graded school districts	$6,972,168 00	$7,242,286 00	$270,118 00
Estimated value of property in ungraded school districts	3,973,010 00	4,024,770 00	51,760 00
Total	$10,945,178 00	$11,267,056 00	$321,878 00
Number of districts reporting dictionaries in school	2,939	3,113	174
Number of districts reporting globes in school	1,404	1,496	92
Number of districts reporting maps in school	1,811	1,844	33
Financial.			
Balance on hand from preceding year	$1,098,974 09	$1,012.722 44	*dec.* $86,251 65
Amount of one mill tax received	687,608 04	679,279 75	*dec.* 8,328 29
Amount of primary school interest fund received	725,169 57	705,663 84	*dec.* 19,505 73
Amount received from tuition from non-residents	51,652 31	50,023 72	*dec.* 1,628 59
Amount received from district taxes	2,601,620 33	2,700,030 23	98,409 90
Amount received from all other sources	479,436 70	555,692 97	76,256 27
Total resources	$5,644,461 04	$5,703,412 95	$58,951 91
Amount paid male teachers	$885,361 88	$913,430 70	$28,068 82
Amount paid female teachers	1,789,123 29	1,870,892 84	81,769 55
Amount paid for building and repairs	729,282 44	695,502 50	*dec.* 33,779 94
Amount paid on bonded indebtedness	348,502 46	377,804 29	29,301 83
Amount paid for all other purposes	884,064 93	871,310 21	*dec.* 12,754 72
Balance carried to next year	1,008,126 04	974,472 41	*dec.* 33,653 63
Total expenditures, including balance on hand	$5,644,461 04	$5,703,412 95	$58,951 91
Total expenditures in graded school districts	$2,587,571 64	$2,726,350 58	$138,778 94
Total expenditures in ungraded school districts	2,048,763 36	2,002,589 96	*dec.* 46,173 40
Total net expenditures	$4,636,335 00	$4,728,940 54	$92,605 54
Total bonded indebtedness of districts	$1,396,083 43	$1,469,873 42	$73,789 99
Total floating indebtedness of districts	117,616 45	120,661 45	3,045 00
Total indebtedness	$1,513,699 88	$1,590,534 87	$76,834 99
Total indebtedness of graded school districts	$1,166,249 33	$1,238,939 31	72,689 98
Total indebtedness of ungraded school districts	347,450 55	351,595 56	4,145 01
Total indebtedness	$1.513,699 88	$1,590,534 87	$76,834 99

TABLE I.—*Continued.*

Items.	1884.	1885.	Increase or Decrease.
Total amount due the districts	$159,758 46	$154,550 87	$5,207 59
School Libraries.			
Number of townships maintaining libraries	460	537	77
Number of districts of 100 children or more maintaining libraries	276	294	18
Number of districts of less than 100 children maintaining libraries	944	933	dec. 11
Total number of school libraries	1,680	1,764	84
Number of volumes in township libraries	102,658	109,627	6,969
Number of volumes in libraries in districts of 100 or more children	193,581	211,841	18,260
Number of volumes in libraries in districts of less than 100 children	51,318	50,201	dec. 1,117
Total number of volumes in all libraries	347,557	371,669	24,112
Amount of taxes voted for township libraries	$2,538 62	$4,255 87	$1,717 25
Amount received from county treasurers for township libraries	14,560 25	11,263 17	dec. 3,297 08
Amount received from county treasurers for district libraries	17,524 71	16,804 98	dec. 719 73
Number of townships diverting moneys to general school purposes	444	463	19
Number of townships forfeiting library moneys	277	250	dec. 27
Amount paid for support of township libraries	$13,261 53	$14,836 86	$1,575 33
Amount paid for support of district libraries	37,641 28	33,419 92	dec. 4,221 36
Teachers' Institutes.			
Number of State institutes held	68	74	6
Number of men enrolled at such institutes	1,702	1,933	231
Number of women enrolled at such institutes	4,659	5,157	498
Total enrollment	6,361	7,090	729
Amount received from State treasurer for such institutes	$1,800 00	$1,790 20	dec. $9 80
Amount received from county treasurer for such institutes	8,000 35	9,415 39	1,415 04
Total amount received and expended	$9,800 35	$11,205 59	$1,405 24
Miscellaneous.			
Number of counties reporting county teachers' associations	38	35	dec.
Number of visits to schools by secretaries of county boards	520	613	93
Number of visits to schools by other members of county boards	273	263	dec. 10
Total number of visits	793	876	83

TABLE I.—*Continued.*

Items.	1884.	1885.	Increase or Decrease.
Amount of *per diem* received by examiners	$11,903 10	$13,132 32	$1,229 22
Amount paid secretaries of county boards for services	13,169 50	13,546 00	376 50
Amount received by secretaries of county boards for special certificates	1,372 50	1,181 75	*dec.* 190 75
Total compensation	$26,445 10	$27,860 07	$1,414 97
Amount allowed by supervisors for expenses of county boards	$948 92	$1,321 13	$372 21
Amount paid and due township inspectors for services	17,813 85	19,114 94	1,301 09
Amount paid chairmen of boards of inspectors	24,907 12	27,650 59	2,743 47

TABLE II.

Apportionment of the Primary School Interest Fund for 1885, at $1.24 Per Capita, Made May 7, 1885.

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Totals	577,063	574,533	$713,238 29
Alcona	1,179	1,179	$1,461 96
Allegan	12,518	12,518	15,522 32
Alpena	3,724	3,647	4,522 28
Antrim	2,829	2,787	3,455 88
Arenac	1,230	1,230	1,525 20
Baraga	776	745	923 80
Barry	7,916	7,916	9,815 84
Bay	14,410	14,368	17,816 32
Benzie	1,461	1,461	1,811 64
Berrien	12,167	12,167	15,087 08
Branch	7,995	7,995	9,913 80
Calhoun (*a*)	11,954	11,954	14,837 37
Cass (*b*)	6,379	6,344	7,955 64
Charlevoix	2,892	2,861	3,547 64
Cheboygan	3,178	3,127	3,877 48
Chippewa	2,363	2,178	2,700 72
Clare	1,368	1,364	1,691 36
Clinton	8,673	8,673	10,754 52
Crawford *	619	606	734 41

---

a Including $14 41 deficiency for 1884.
b Including $89 08 deficiency for 1884.
* Less $17 03 erroneously apportioned in 1884.

TABLE II.—*Continued.*

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Delta	2,341	2,341	$2,902 84
Eaton	9,351	9,315	11,550 60
Emmet	2,525	2,525	3,131 00
Genesee	11,820	11,820	14,656 80
Gladwin	480	474	587 76
Grand Traverse	3,272	3,207	3,976 68
Gratiot	8,264	8,127	10,077 48
Hillsdale	9,491	9,462	11,732 88
Houghton	8,754	8,754	10,854 96
Huron (*c*)	8,810	8,774	11,127 13
Ingham	10,619	10,619	13,167 56
Ionia	9,817	9,817	12,173 08
Iosco (*d*)	2,857	2,851	3,574 54
Isabella	5,131	5,131	6,362 44
Jackson	12,766	12,704	15,752 96
Kalamazoo	9,971	9,937	12,321 88
Kalkaska	1,458	1,422	1,763 28
Kent	25,615	25,583	31,722 92
Keweenaw	1,470	1,464	1,815 36
Lake	1,856	1,856	2,301 44
Lapeer (*e*)	9,916	9,873	12,311 33
Leelanaw	2,448	2,392	2,966 08
Lenawee	14,297	14,297	17,728 28
Livingston	6,487	6,411	7,949 64
Mackinac	1,479	1,322	1,639 28
Macomb	10,892	10,798	13,389 52
Manistee	5,723	5,690	7,055 60
Manitou	408	408	505 92
Marquette	9,425	9,368	11,616 32
Mason (*f*)	3,925	3,925	4,985 12
Mecosta (*g*)	6,046	5,991	7,502 20
Menominee	4,442	4,442	5,508 08
Midland	2,943	2,883	3,574 92
Missaukee	793	749	928 76
Monroe	11,810	11,779	14,605 96
Montcalm	10,783	10,783	13,370 92

---

c Including $247 37 deficiency for 1883 and 1884.
d Including $39 30 deficiency for 1884.
e Including $68 81 deficiency for 1884
f Including $88 12 deficiency for 1884.
g Including $73 36 deficiency for 1884.

TABLE II.—*Continued.*

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Montmorency	229	226	$280 24
Muskegon	11,438	11,406	14,143 44
Newaygo	5,625	5,584	6,924 16
Oakland	11,573	11,506	14,267 44
Oceana	4,607	4,569	5,665 56
Ogemaw	932	911	1,129 64
Ontonagon	1,128	1,128	1,398 72
Osceola	4,540	4,502	5,582 48
Oscoda	358	301	373 24
Otsego	1,164	1,134	1,406 16
Ottawa	13,044	13,044	16,174 56
Presque Isle	1,190	1,068	1,324 32
Roscommon	432	412	510 88
Saginaw	23,006	23,006	28,527 44
St. Clair (*h*)	16,917	16,917	21,036 03
St. Joseph	7,885	7,885	9,777 40
Sanilac	11,228	11,179	13,861 96
Schoolcraft	727	716	887 84
Shiawassee (*i*)	8,783	8,752	10,940 25
Tuscola (*j*)	10,382	10,382	12,960 91
Van Buren	9,326	9,210	11,420 40
Washtenaw	12,924	12,924	16,025 76
Wayne	64,520	64,490	79,967 60
Wexford	2,959	2,867	3,555 08

h Including $58 95 deficiency for 1884.
i Including $87 77 deficiency for 1884.
Including $87 23 deficiency for 1883.

TABLE III.

First Semi-Annual Apportionment of the Primary School Interest Fund, made November 5, 1885. Rate per capita, 72 cents.

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Totals	577,063	574,810	$414,467 96
Alcona	1,179	1,179	$848 88
Allegan	12,518	12,518	9,012 96
Alpena	3,724	3,647	2,625 84
Antrim	2,829	2,787	2,006 64
Arenac	1,230	1,230	885 60
Baraga	776	745	536 40
Barry	7,916	7,916	5,699 52
Bay	14,410	14,368	10,344 96
Benzie	1,461	1,461	1,051 92
Berrien	12,167	12,167	8,760 24
Branch	7,995	7,995	5,756 40
Calhoun	11,954	11,954	8,606 88
Cass	6,379	6,344	4,567 68
Charlevoix	2,892	2,861	2,059 92
Cheboygan	3,178	3,127	2,251 44
Chippewa	2,363	2,178	1,568 16
Clare	1,398	1,364	982 08
Clinton	8,673	8,673	6,244 56
Crawford	619	606	436 32
Delta	2,341	2,341	1,685 52
Eaton	9,351	9,315	6,706 80
Emmet	2,525	2,525	1,818 00
Genesee	11,820	11,820	8,510 40
Gladwin	480	474	341 28
Grand Traverse	3,272	3,207	2,309 04
Gratiot	8,264	8,127	5,851 44
Hillsdale	9,491	9,462	6,812 64
Houghton	8,754	8,754	6,302 88
Huron	8,810	8,774	6,317 28
Ingham	10,619	10,619	7,645 68
Ionia	9,817	9,817	7,068 24
Iosco	2,857	2,851	2,052 72
Isabella	5,131	5,131	3,694 32

TABLE III.—*Continued.*

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Jackson	12,766	12,704	$9,146 88
Kalamazoo	9,971	9,937	7,154 64
Kalkaska	1,458	1,422	1,023 84
Kent	25,615	25,583	18,419 76
Keweenaw	1,470	1,464	1,054 08
Lake	1,856	1,856	1,336 32
Lapeer (*a*)	9,916	9,873	7,138 69
Leelanaw	2,448	2,392	1,722 24
Lenawee	14,297	14,297	10,293 84
Livingston (*b*)	6,487	6,445	4,678 84
Mackinac (*c*)	1,479	1,361	1,028 28
Macomb (*d*)	10,892	10,892	8,070 55
Manistee	5,723	5,690	4,096 80
Manitou	408	408	293 76
Marquette	9,425	9,368	6,744 96
Mason (*e*)	3,925	3,925	2,894 12
Mecosta	6,046	5,991	4,313 52
Menominee	4,442	4,442	3,198 24
Midland (*f*)	2,943	2,907	2,122 80
Missaukee	793	749	539 28
Monroe	11,810	11,779	8,480 88
Montcalm	10,783	10,783	7,763 76
Montmorency	220	226	162 72
Muskegon	11,438	11,406	8,212 32
Newaygo	5,625	5,584	4,020 48
Oakland	11,573	11,506	8,284 32
Oceana	4,607	4,569	3,289 68
Ogemaw	932	911	655 92
Ontonagon	1,128	1,128	812 16
Osceola	4,540	4,502	3,241 44
Oscoda	358	301	216 72
Otsego	1,164	1,134	816 48
Ottawa	13,044	13,044	9,391 68
Presque Isle	1,190	1,068	768 96
Roscommon	432	412	296 64

a Including $30 13 deficiency for 1884.
b Including $38 44 deficiency for May, 1885.
c Including $48 36 deficiency for May, 1885.
d Including $228 31 deficiency for 1884 and 1885.
e Including $68 12 deficiency for 1884.
f Including $29 76 deficiency for 1885.

TABLE III.—*Continued.*

Counties.	No. of children in school census.	No. included in apportionment.	Amount apportioned.
Saginaw (*g*)	23,006	23,006	$16,619 34
St. Clair	16,917	16,917	12,180 24
St. Joseph	7,885	7,885	5,677 20
Sanilac	11,228	11,179	8,048 88
Schoolcraft	727	716	515 52
Shiawassee	8,783	8,752	6,301 44
Tuscola	10,382	10,382	7,475 04
Van Buren	9,326	9,210	6,631 20
Washtenaw	12,924	12,924	9,305 28
Wayne	64,520	64,490	46,432 80
Wexford (*h*)	2,959	2,953	2,232 80

g Including $55 02 deficiency for 1885.
h Including $106 64 deficiency for 1885.

TABLE IV.

General School Statistics, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	No. of townships and cities reporting.	Whole No. of School Districts.	No. of Districts that Maintained School.	No. of Graded School Districts.	No. of children between five and twenty years of age.	No. of children that attended Public Schools.	Average No. of months of School.	Number of School Houses and Material of Construction.				Whole No. of Sittings provided in School Houses.	Estimated Valuation of School Property.
								Frame.	Brick.	Stone.	Log.		
Totals	1,186	6,932	6,880	440	595,752	411.954	7.1	5,574	1061	74	485	512,659	$11,267,056 00
Alcona	4	20	19	1	1,194	853	7.7	15	....	....	5	995	$15,275 00
Alger	3	5	5	....	195	145	8.4	1	1	....	4	385	10,200 00
Allegan	24	184	184	12	12,629	10,177	7.7	172	15	....	2	12,742	164,379 00
Alpena	7	24	23	1	3,864	2,192	5.5	35	1	....	10	2,815	59,739 00
Antrim	14	64	62	2	2,953	2,410	6.3	44	2	....	20	3,511	61,465 00
Arenac	9	22	22	....	1,222	930	7.8	20	....	....	2	1,356	13,575 00
Baraga	4	10	10	1	833	552	7.6	8	....	....	2	605	15,100 00
Barry	17	147	147	5	7,906	6,815	7.7	137	10	....	2	9,162	155,595 00
Bay	13	45	45	3	14,756	7,625	8.1	47	9	....	3	7,697	255,655 00
Benzie	12	40	40	2	1,493	1,244	6.1	34	....	....	5	1,663	19,873 00
Berrien	21	149	149	13	12,128	9,192	7.9	120	36	....	....	12,278	265,130 00
Branch	17	130	128	6	7,988	6,676	8.	84	37	12	....	8,946	176,169 00

TABLE IV.—*Continued.*

Counties.	No. of townships and cities reporting.	Whole No. of School Districts.	No. of Districts that Maintained School.	No. of Graded School Districts.	No. of children between five and twenty years of age.	No. of children that attended Public Schools.	Average No. of months of School.	Number of School Houses and Material of Construction.				Whole No. of Sittings provided in School houses.	Estimated Valuation of School Property.
								Frame.	Brick.	Stone.	Log.		
Calhoun	23	165	165	8	11,884	8,672	7.9	137	35	6	....	11,758	$454,860 00
Cass	16	116	116	5	6,312	5,123	8.1	88	29	....	....	7,249	145,000 00
Charlevoix	15	66	65	3	2,974	2,085	6.1	46	1	....	16	3,076	38,779 00
Cheboygan	14	50	50	2	3,201	1,912	6.5	28	1	....	19	2,389	32,120 00
Chippewa	8	40	38	2	2,543	1,655	5.9	16	1	....	17	2,137	26,575 00
Clare	9	32	29	3	1,542	1,192	6.4	23	....	....	8	1,777	25,600 00
Clinton	16	130	130	7	8,836	6,790	7.7	112	19	....	1	8,811	118,664 00
Crawford	9	37	37	1	614	570	5.9	27	....	....	7	1,325	19,915 00
Delta	12	25	25	2	2,448	1,312	7.3	14	1	....	5	1,489	44,417 00
Eaton	18	147	147	8	9,516	8,033	7.6	123	30	1	1	9,436	145,022 00
Emmet	12	62	60	2	2,569	1,866	5.4	35	....	....	20	2,596	28,225 00
Genesee	19	159	159	12	11,931	9,727	7.8	153	14	....	1	11,843	285,200 00
Gladwin	8	20	20	....	509	432	6.6	10	....	....	11	770	12,059 00
Grand Traverse	13	60	59	3	3,706	2,749	6.4	62	1	....	5	3,383	56,370 00
Gratiot	17	122	122	6	8,343	6,955	7.5	112	6	....	4	8,518	120,530 00
Hillsdale	19	169	169	10	9,362	7,659	7.6	112	51	9	....	11,161	227,860 00
Houghton	7	20	20	10	9,256	5,887	8.2	14	1	1	....	4,643	86,800 00
Huron	27	108	108	9	9,516	5,668	7.4	83	4	....	14	7,373	84,993 00
Ingham	17	135	135	9	10,747	8,370	8.	111	31	....	2	10,190	235,358 00
Ionia	17	145	145	9	9,846	7,894	7.8	118	28	1	2	10,573	200,755 00
Iosco	11	25	25	4	3,088	2,050	6.9	22	....	....	2	1,949	20,000 00
Isabella	16	95	95	3	5,412	3,927	6.9	73	3	....	16	5,145	71,285 00
Jackson	20	158	158	10	12,848	10,171	8.2	115	55	1	....	11,953	353,125 00
Kalamazoo	17	139	139	7	10,305	7,612	7.8	115	31	....	....	10,369	284,535 00
Kalkaska	12	50	50	1	1,525	1,205	6.4	43	1	....	5	2,300	33,663 00
Kent	25	213	212	15	25,982	18,554	7.9	187	42	....	4	22,494	819,865 00
Keweenaw	7	10	10	2	1,309	884	8.1	11	....	....	1	1,377	19,640 00
Lake	13	47	46	3	1,910	1,548	6.4	38	1	....	5	2,166	34,575 00
Lapeer	19	136	136	11	10,130	8,127	8.	133	6	1	1	9,796	147,203 00
Leelanaw	11	51	51	3	2,504	1,653	5.8	33	....	1	16	2,389	24,015 00
Lenawee	24	199	199	16	14,152	10,882	8.2	100	103	8	....	14,535	370,095 00
Livingston	16	134	134	5	6,470	5,516	7.9	118	11	3	1	7,707	118,835 00
Mackinac	9	25	25	2	1,557	1,025	4.8	13	....	....	9	1,319	21,414 00
Macomb	15	112	112	9	10,966	6,586	8.2	99	17	....	....	8,775	179,515 00
Manistee	13	51	51	3	6,140	3,928	6.8	39	3	....	10	4,215	112,905 00
Manitou	3	4	4	1	524	288	8.	2	....	....	3	625	1,250 00

TABLE IV.—*Continued.*

Counties.	No. of townships and cities reporting.	Whole No. of School Districts.	No. of Districts that Maintained School.	No. of Graded School Districts.	No. of children between five and twenty years of age.	No. of children that attended Public Schools.	Average No. of months of School.	Number of School Houses and Material of Construction.				Whole No. of Sittings provided in School-houses.	Estimated Valuation of School Property.
								Frame.	Brick.	Stone.	Log.		
Marquette	18	41	41	10	9,468	6,589	8.	39	2	2	7	6,416	$192,300 00
Mason	14	52	51	1	4,033	3,032	7.	45	1	....	9	3,193	48,838 00
Mecosta	17	99	94	4	6,414	4,872	6.8	80	3	....	13	6,043	104,237 00
Menominee	10	33	32	3	4,991	3,474	7.9	33	1	....	6	4,086	83,436 00
Midland	15	56	56	2	3,140	2,282	6.7	38	2	....	14	3,140	49,325 00
Missaukee	12	38	38	....	833	725	6.	28	....	....	7	1,355	19,823 00
Monroe	16	138	138	6	11,888	7,512	7.8	74	64	2	1	9,703	144,325 00
Montcalm	22	132	131	11	10,969	8,717	8.	124	3	....	6	10,233	154,790 00
Montmorency	4	19	18	....	294	217	6.5	6	....	....	13	549	6,684 00
Muskegon	18	91	91	7	11,718	8,128	6.8	80	11	....	10	8,663	253,095 00
Newaygo	22	104	104	4	5,795	4,433	7.4	88	3	....	12	5,972	81,455 00
Oakland	25	217	216	15	11,548	9,476	7.6	179	31	14	....	14,074	289,180 00
Oceana	16	87	86	4	4,740	3,777	7.	76	....	....	9	5,048	58,910 00
Ogemaw	14	38	36	1	1,133	869	6.3	26	....	....	9	1,403	16,271 00
Ontonagon	5	11	10	5	1,077	818	7.7	9	....	....	2	962	17,300 00
Osceola	16	85	81	3	4,779	3,304	6.5	70	....	....	14	4,632	51.864 00
Oscoda	9	31	29	....	413	325	3.7	14	....	....	9	765	6,037 00
Otsego	8	39	38	1	1,194	916	6.2	32	....	....	3	1,598	24,250 00
Ottawa	17	119	119	17	12,796	9,450	8.	107	16	1	2	11,174	183,775 00
Presque Isle	11	29	29	1	1,348	820	4.7	12	....	....	18	1,619	15,540 00
Roscommon	6	13	11	....	403	283	5.7	6	....	....	5	527	5,475 00
Saginaw	30	146	144	9	23,272	13,626	7.7	129	19	1	10	14,451	426,736 00
St. Clair	25	151	151	8	17,312	11,422	7.9	141	15	....	4	13,691	240,189 00
St. Joseph	16	124	123	9	7,806	6,588	8.1	89	33	2	....	9,172	245,525 00
Sanilac	26	131	130	12	11,796	8,358	8.	114	5	....	13	9,743	92,742 00
Schoolcraft	5	15	12	1	716	387	5.2	8	....	....	5	651	4,855 00
Shiawassee	18	122	122	7	8,960	7,063	8.1	112	14	....	2	8,989	187,137 00
Tuscola	23	135	134	10	10,434	8,001	7.	122	10	....	5	9,743	127,397 00
Van Buren	18	156	156	13	9,444	7,655	7.6	139	18	1	....	10,875	194,255 00
Washtenaw	22	166	165	7	13,189	9,363	7.9	107	65	7	....	11,835	394,095 00
Wayne	20	148	148	15	73,034	29,856	8.5	111	78	....	1	29,340	1,283,488 00
Wexford	16	69	66	2	3,177	2,298	6.2	54	....	....	15	3,248	50,550 00

TABLE V.

Employment of Teachers, as Reported by School Inspectors, for the Year ending September 7, 1885.

Counties.	No. of teachers required to supply the schools.		Whole No. of teachers employed.		Aggregate No. of months taught by all teachers.		Total wages of teachers.			Average monthly wages of teachers.	
	Graded schools	Ungraded schools	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Totals	3,127	6,494	3,876	11,482	19,793	60,079	$913,354 52	$1,871,925 64	$2,785,280 16	$46 17	$31 18
Alcona	2	19	12	13	88	99	$4,556 30	$3,639 00	$8,195 30	$51 78	$36 76
Alger	......	5	.....	5	......	42	....	2,075 00	2,075 00	......	49 40
Allegan	49	177	94	318	421	1,383	18,174 78	35,195 85	53,370 63	43 17	25 45
Alpena	23	39	12	68	80	383	3,586 15	14,514 95	18,101 10	44 83	37 90
Antrim	14	64	27	91	123	428	4,856 50	12,795 58	17,652 08	39 49	29 90
Arenac	....	23	9	27	59	121	2,476 00	3,936 60	6,412 60	41 97	32 53
Baraga	5	9	6	9	44	71	2,757 00	3,100 00	5,857 00	62 66	43 66
Barry	27	122	84	251	336	1,035	12,162 33	24,262 29	36,424 62	36 20	23 44
Bay	91	44	21	124	160	1,093	10,303 25	41,080 17	51,383 42	64 40	37 58
Benzie	8	37	16	53	75	228	3,110 50	6,547 53	9,658 03	41 47	28 72
Berrien	80	139	81	264	414	1,351	20,229 45	40,914 82	61,144 27	48 86	30 28
Branch	49	124	98	230	462	1,016	18,139 11	25,349 83	43,488 94	39 26	24 95
Calhoun	84	158	86	339	426	1,670	19,848 68	46,863 11	66,711 79	46 59	28 06
Cass	27	113	87	172	398	781	16,108 30	23,200 36	39,308 66	40 47	29 71
Charlevoix	9	64	28	72	134	324	5,106 26	8,835 00	13,941 26	38 11	24 18
Cheboygan	8	49	28	48	157	249	6,888 00	7,568 50	14,456 50	43 88	30 40
Chippewa	7	35	19	30	105	179	3,761 81	5,592 75	9,354 56	35 83	31 24
Clare	10	26	9	48	59	220	2,865 00	6,068 50	8,933 50	48 56	27 59
Clinton	36	124	101	196	446	877	17,657 06	24,202 99	41,860 05	39 59	27 60
Crawford	....	37	17	40	75	163	2,667 84	4,691 45	7,359 29	35 57	28 78
Delta	14	23	7	37	40	202	2,714 00	9,829 00	12,543 00	67 85	37 52
Eaton	50	138	83	277	346	1,162	13,075 38	31,682 79	44,758 17	37 79	27 09
Emmet	13	50	23	80	93	351	3,727 26	9,315 96	13,043 22	40 08	26 54
Genesee	74	149	110	261	550	1,352	22,442 93	38,257 65	60,700 58	40 80	28 30
Gladwin	....	20	5	25	31	110	1,123 00	3,173 00	4,296 00	36 23	28 85
Grand Traverse	17	55	36	76	164	348	7,006 50	12,079 62	19,086 12	42 72	34 71
Gratiot	27	117	91	175	401	740	14,732 50	20,341 15	35,073 65	36 72	27 49
Hillsdale	44	160	103	308	441	1,226	16,825 31	28,712 63	45,537 94	38 15	23 42
Houghton	81	6	20	86	176	734	16,495 00	36,380 75	52,875 75	89 65	49 57
Huron	22	91	50	99	338	563	14,016 50	16,067 74	30,084 24	41 76	28 54

TABLE V.—*Continued.*

Counties.	No. of teachers required to supply the schools.		Whole No. of teachers employed.		Aggregate No. of months taught by all teachers.		Total wages of teachers.			Average monthly wages of teachers.	
	Graded schools	Ungraded schools	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Ingham	63	129	91	277	408	1,272	$17,999 02	$33,958 55	$51,957 57	$46 41	$26 70
Ionia	49	137	98	235	479	1,077	20,868 31	30,500 65	51,368 96	43 56	28 32
Iosco	21	18	10	38	73	269	4,801 00	8,827 00	13,628 00	65 79	32 81
Isabella	12	92	48	116	222	521	8,175 65	15,967 15	24,142 80	36 83	30 65
Jackson	89	150	97	314	473	1,607	25,189 28	47,560 84	72,750 12	53 25	29 60
Kalamazoo	79	134	79	280	360	1,440	17,764 06	42,737 40	60,501 46	49 34	29 68
Kalkaska	2	48	29	58	125	203	4,858 33	6,868 00	11,726 33	38 87	33 83
Kent	223	198	112	528	608	3,210	33,879 45	109,501 51	143,380 96	55 72	34 11
Keweenaw	3	13	9	10	77	56	6,064 50	2,406 00	8,470 50	78 76	42 96
Lake	8	43	11	66	60	304	2,782 00	9,181 15	11,963 15	46 36	30 20
Lapeer	43	126	77	185	469	962	19,228 01	24,630 23	43,858 24	41 00	25 60
Leelanaw	4	49	25	56	123	200	4,451 90	5,562 37	10,014 27	36 19	27 81
Lenawee	95	183	116	385	564	1,838	26,402 52	50,222 15	76,624 67	46 81	27 32
Livingston	26	129	88	221	387	897	14,079 87	18,600 53	32,680 40	36 38	20 74
Mackinac	9	26	14	23	84	131	4,084 25	4,735 00	8,819 25	48 62	36 15
Macomb	39	104	58	144	374	881	17,212 17	23,164 95	40,377 12	46 02	26 29
Manistee	39	50	27	99	143	539	7,047 75	21,950 00	28,997 75	49 29	40 72
Manitou	....	5	3	5	14	24	600 00	600 00	1,200 00	42 86	25 00
Marquette	78	31	28	98	217	822	16,890 11	36,202 25	53,092 36	77 83	44 04
Mason	22	52	34	73	170	422	7,207 25	15,213 00	22,420 25	42 40	36 85
Mecosta	27	88	39	140	191	710	8,522 62	22,806 25	31,328 87	44 62	32 12
Menominee	33	33	13	63	102	489	6,359 00	19,303 30	25,662 30	62 34	39 47
Midland	10	54	12	87	55	415	2,728 00	12,861 63	15,589 63	49 60	30 99
Missaukee	....	35	14	40	61	171	2,498 37	6,260 62	8,758 99	40 96	36 61
Monroe	24	135	74	217	338	958	13,504 75	24,535 50	38,040 25	39 95	25 61
Montcalm	54	124	73	237	373	1,135	16,976 81	32,815 80	49,792 61	45 51	28 91
Montmorency	....	18	4	23	22	102	722 75	2,989 10	3,711 85	32 85	28 32
Muskegon	87	90	41	191	245	1,220	14,733 50	47,630 00	62,363 50	60 14	39 04
Newaygo	12	97	45	156	207	645	8,278 83	19,297 10	27,575 93	39 94	31 63
Oakland	74	202	104	326	550	1,702	24,131 64	40,152 30	64,283 94	43 88	23 59
Oceana	15	83	57	108	225	502	9,089 19	14,313 10	23,402 29	40 40	28 51
Ogemaw	2	35	12	42	61	189	2,290 33	5,964 30	8,254 63	37 55	31 56
Ontonagon	13	9	7	15	68	113	5,452 50	4,965 00	10,417 50	80 18	43 94
Osceola	16	79	41	117	194	508	8,177 85	15,226 00	23,403 85	42 15	30 00
Oscoda	....	26	8	27	27	88	757 00	2,051 50	2,808 50	28 04	23 31
Otsego	3	35	16	46	87	181	3,276 00	5,651 24	8,927 24	37 65	31 22

TABLE V.—*Continued.*

Counties.	No. of teachers required to supply the schools.		Whole No. of teachers employed.		Aggregate No. of months taught by all teachers.		Total wages of teachers.			Average monthly wages of teachers.	
	Graded schools	Ungraded schools	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Men.	Women.
Ottawa	76	104	62	187	431	1,118	$19,977 30	$32,539 70	$52,517 00	$46 35	$29 11
Presque Isle	2	27	24	12	105	41	3,568 37	1,278 00	4,846 37	33 98	31 17
Roscommon	......	12	7	14	33	52	1,653 00	1,660 50	3,313 50	50 09	31 93
Saginaw	142	139	91	283	510	1,955	28,899 41	66,794 92	95,694 33	56 66	34 16
St. Clair	67	134	57	252	351	1,476	15,387 25	41,787 45	57,174 70	43 84	28 31
St. Joseph	58	115	72	231	315	1,181	16,842 90	31,318 38	48,161 28	53 47	26 52
Sanilac	23	120	83	114	541	650	19,939 25	16,949 40	36,888 65	36 86	26 08
Schoolcraft	3	12	10	9	44	57	2,210 00	2,386 25	4,596 25	50 23	41 86
Shiawassee	41	115	91	204	398	931	16,734 85	25,654 90	42,389 75	42 05	27 56
Tuscola	32	122	74	160	437	824	17,490 28	22,481 68	39,971 96	40 02	27 28
Van Buren	55	142	98	251	453	1,138	19,178 24	30,708 57	49,886 81	42 34	26 99
Washtenaw	97	158	100	300	515	1,708	30,524 40	49,476 20	80,000 60	59 27	29 28
Wayne	374	134	88	499	591	4,232	39,024 75	206,351 55	245,376 30	66 03	48 76
Wexford	12	64	42	78	191	352	7,427 25	11,052 10	18,479 35	38 36	31 40

TABLE VI.

Resources of School Districts, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	Moneys on hand Sept. 1, 1884.	One Mill tax.	Primary School Interest Fund.	Library Moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Totals	$1,012,722 44	$679,279 75	$705,663 84	$27,341 18	$2,700,030 23	$578,375 51	$5,703,412 95
Alcona	$2,869 64	$1,984 76	$1,185 73	....	$6,980 80	$1,370 76	$14,391 69
Alger	300 39	1,734 34	188 14	....	2,184 57	2,042 22	6,449 66
Allegan	17,389 16	12,969 65	15,399 59	$302 02	39,332 54	6,952 30	92,345 26
Alpena	2,660 86	539 11	4,398 31	371 42	26,941 46	1,276 02	36,187 18
Antrim	3,884 19	2,307 96	3,242 55	....	22,829 61	16,105 44	48,369 75
Arenac	3,212 02	819 34	1,530 67	....	6,596 89	277 79	12,436 71
Baraga	4,345 29	1,103 02	893 58	....	6,725 00	60 00	13,126 89
Barry	13,759 26	9,575 63	9,812 44	479 20	30,976 41	14,241 47	78,844 50
Bay	22,963 65	3,892 78	16,846 27	47 06	70,781 94	5,576 43	120,108 13
Benzie	1,918 66	1,276 68	1,778 98	19 44	10,661 77	2,239 56	17,895 09
Berrien	19,344 36	21,582 15	14,741 58	229 82	49,336 49	3,372 37	108,606 77

TABLE VI.—*Continued.*

Counties.	Moneys on hand Sept. 1, 1884.	One Mill tax.	Primary School Interest Fund.	Library Moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Branch	$17,126 28	$17,365 39	$9,895 57	$263 79	$33,155 95	$5,873 80	$83,680 78
Calhoun	11,835 77	17,383 24	14,889 21	792 61	78,150 93	14,890 37	137,942 13
Cass	11,122 12	13,291 83	8,052 86	385 27	30,279 40	7,428,88	70,560 36
Charlevoix	4,499 02	1,757 54	3,463 95	27 97	15,053 08	1,427 51	26,229 07
Cheboygan	7,075 45	2,830 26	4,067 82	63 56	16,918 83	2,771 93	33,727 85
Chippewa	1,916 22	2,474 57	2,324 77	308 55	7,479 70	4,274 58	18,778 39
Clare	6,023 55	2,518 54	1,365 39	....	8,344 61	2,918 08	21,170 17
Clinton	14,643 85	16,040 86	10,723 61	279 49	25,108 77	12,952 28	79,748 86
Crawford	2,771 51	1,110 71	684 35	30 61	11,500 82	775 43	16,873 43
Delta	3,347 22	1,250 92	3,518 63	....	14,562 38	10,806 92	33,486 07
Eaton	13,568 58	14,537 91	11,630 74	7 72	37,288 61	13,137 92	90,171 48
Emmet	2,532 05	867 10	3,253 81	....	14,875 92	2,551 21	24,080 09
Genesee	15,437 74	19,191 75	14,986 15	620 54	52,366 81	6,890 58	109,493 57
Gladwin	1,205 89	1,245 44	646 89	....	5,045 86	1,899 70	10,043 78
Grand Traverse	3,081 35	3,110 57	3,939 07	10 50	24,096 33	4,431 83	38,669 65
Gratiot	9,910 34	6,723 94	9,162 35	103 27	32,720 47	17,777 89	76,398 26
Hillsdale	11,860 70	18,453 93	12,101 57	454 14	29,272 00	3,798 74	75,941 08
Houghton	61,686 44	29,421 13	10,829 96	269 84	41,632 68	5,466 24	149,306 29
Huron	11,203 05	4,583 35	11,039 30	341 19	26,423 66	2,990 77	56,581 32
Ingham	13,881 16	16,052 51	12,475 96	500 05	51,080 04	9,134 99	103,124 71
Ionia	14,889 30	14,063 71	12,444 46	314 55	40,217 11	12,865 54	94,794 6
Iosco	4,463 30	1,322 89	3,347 34	300 00	17,182 35	2,188 67	28,749 64
Isabella	11,318 60	3,374 49	6,017 36	49 67	21,896 55	3,873 99	46,530 66
Jackson	21,370 53	21,318 87	15,369 34	668 41	65,829 87	7,611 97	132,168 99
Kalamazoo	14,909 14	19,129 83	13,919 81	1,896 82	60,668 81	19,893 88	130,417 79
Kalkaska	7,249 26	2,916 50	1,836 24	116 10	13,715 57	1,752 37	27,586 04
Kent	41,477 36	28,432 52	31,375 89	1,510 32	166,044 32	93,146 53	361,986 94
Keweenaw	4,597 41	3,046 88	1,835 06	39 87	5,628 05	96 47	15,248 74
Lake	3,500 26	1,655 43	2,079 28	....	15,996 99	1,129 94	24,361 90
Lapeer	11,066 11	11,208 25	12,196 91	166 63	31,450 74	5,816 62	71,905 26
Leelanaw	2,509 43	809 86	2,919 81	....	9,572 40	1,380 75	17,192 25
Lenawee	19,330 56	27,464 57	17,639 88	723 96	54,443 14	4,534 01	124,136 12
Livingston	10,516 04	12,524 27	8,139 94	93 57	24,514 85	4,178 20	59,966 87
Mackinac	4,472 13	1,516 12	1,168 16	300 60	8,669 80	4,767 26	20,894 07
Macomb	30,514 90	16,785 77	13,310 40	131 28	23,945 80	4,531 25	89,219 40
Manistee	7,736 35	4,880 10	6,888 50	656 40	33,693 82	22,096 58	75,960 75
Manitou	692 67	57 50	502 77	....	423 45	305 00	1,951 39
Marquette	30,279 30	17,649 11	8,103 43	230 74	70,060 67	4,201 36	131,124 61

TABLE VI.—*Continued.*

Counties.	Moneys on hand Sept. 1, 1884.	One Mill tax.	Primary School Interest Fund.	Library Moneys.	District taxes for all purposes.	Raised from all other sources.	Total resources for the year.
Mason	$6,436 37	$3,800 79	$5,005 67	$510 95	$23,801 78	$859 16	$40,414 72
Mecosta	17,118 73	5,067 25	6,821 10	395 94	37,791 34	12,356 78	79,551 14
Menominee	8,680 45	6,324 62	6,444 32	....	41,043 86	10,048 25	72,541 50
Midland	6,264 71	1,748 98	3,135 56	43 76	20,253 82	2,172 02	33,618 85
Missaukee	5,123 01	2,530 57	961 09	....	12,894 64	3,745 12	25,254 43
Monroe	14,588 26	15,603 87	14,711 94	524 58	18,269 43	5,717 43	69,415 51
Montcalm	19,768 40	7,756 15	13,550 78	158 41	42,379 33	7,477 92	91,090 99
Montmorency	2,145 94	712 62	279 28	....	4,282 37	1,485 29	8,905 50
Muskegon	16,299 36	8,052 32	13,600 19	231 64	77,629 94	20,421 01	136,234 46
Newaygo	13,697 26	3,773 16	6,495 86	155 57	29,471 41	6,756 41	60,349 67
Oakland	13,666 60	23,212 97	14,099 87	172 93	45,400 25	8,130 98	104,683 60
Oceana	8,340 49	3,099 63	5,372 21	....	22,613 62	1,833 98	41,259 93
Ogemaw	3,395 44	1,102 06	835 03	19 30	11,110 28	568 27	17,030 38
Ontonagon	8,727 21	4,315 78	1,456 76	....	7,540 00	283 08	22,322 83
Osceola	7,960 03	3,076 45	5,387 31	47 59	26,373 68	3,870 87	46,715 93
Oscoda	726 32	644 49	376 18	....	3,873 69	364 33	5,985 01
Otsego	2,381 50	1,336 76	1,396 74	285 00	11,520 11	1,084 68	18,004 79
Ottawa	15,083 44	11,943 67	15,437 79	311 37	45,092 25	4,117 86	91,986 38
Presque Isle	1,035 31	658 33	1,303 19	11 30	4,105 48	838 25	7,951 86
Roscommon	1,657 50	1,438 24	478 43	209 44	2,690 53	555 17	7,029 31
Saginaw	38,286 26	13,247 76	28,768 38	818 87	113,007 31	22,066 89	216,195 47
St. Clair	27,570 04	13,235 42	20,789 04	284 99	44,588 08	5,559 53	112,027 10
St. Joseph	9,892 40	16,813 62	9,906 68	198 95	40,698 13	11,895 53	89,405 31
Sanilac	12,303 51	5,251 00	14,203 80	86 89	31,981 32	2,202 95	66,029 47
Schoolcraft	4,552 66	2,785 49	1,109 82	....	4,600 07	452 91	13,500 95
Shiawassee	19,426 86	11,272 87	10,988 93	611 31	38,784 81	8,146 78	89,231 56
Tuscola	21,372 71	7,701 22	12,999 03	40 58	33,365 49	13,661 95	89,140 98
Van Buren	14,993 32	11,151 85	11,586 97	454 88	41,268 27	7,206 44	86,661 73
Washtenaw	14,722 43	29,262 95	16,492 10	469 85	55,426 63	12,136 98	128,510 94
Wayne	110,302 87	24,156 73	80,105 25	8,117 84	289,627 75	20,246 52	532,556 96
Wexford	7,964 54	2,039 55	3,400 16	72 17	25,285 94	2,063 27	40,845 63

TABLE VII.

Expenditures of School Districts, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	Paid Teachers.	Paid for Building and Repairs.	Paid for Library Books and care of Library.	Paid on Bonded Indebtedness.	Paid for all other Purposes.	Total Expenditures for the Year.	Amount on hand Sept. 7, 1885.
Totals	$2,784,323 54	$695,502 50	$36,175 16	$377,804 29	$835,135 05	$4,728,940 54	$974,472 41
Alcona	$8,151 55	$671 44	....	$492 46	$2,413 97	$11,729 42	$2,662 27
Alger	2,075 00	420 07	....	2,294 79	1,432 24	6,222 10	227 56
Allegan	53,372 16	7,068 01	194 31	3,185 72	11,700 92	75,521 12	16,824 16
Alpena	18,106 60	6,764 08	571 13	96 00	7,718 71	33,256 52	2,930 66
Antrim	17,875 18	16,816 15	4 50	1,757 01	7,197 93	43,650 77	4,718 98
Arenac	6,412 60	589 24	5 50	197 18	2,062 37	9,266 89	3,169 82
Baraga	5,848 00	337 35	50 00	1,512 80	2,543 09	10,291 24	2,835 65
Barry	36,436 39	8,882 97	272 14	8,369 81	7,560 56	61,521 87	17,322 63
Bay	51,367 42	20,059 87	132 01	2,681 80	22,465 38	96,706 48	23,401 65
Benzie	9,665 68	3,085 73	....	468 06	2,797 37	16,016 84	1,878 25
Berrien	61,154 27	5,436 64	291 75	10,521 15	13,245 44	90,649 25	17,957 52
Branch	43,695 50	5,601 93	14 27	8,132 55	11,744 98	69,189 23	14,491 55
Calhoun	66,945 14	15,287 13	666 76	22,852 54	18,204 91	123,956 48	13,985 65
Cass	39,241 04	6,275 34	141 54	4,767 50	9,371 38	59,796 80	10,763 56
Charlevoix	13,936 33	2,239 36	32 60	2,743 36	3,585 52	22,537 17	3,691 90
Cheboygan	14,486 50	3,863 01	34 66	3,826 57	3,974 27	26,185 01	7,542 84
Chippewa	8,794 42	2,232 09	10 85	2,600 95	2,743 27	16,381 58	2,396 81
Clare	8,995 00	1,718 65	4 00	1,895 85	3,696 75	16,300 25	4,869 92
Clinton	41,930 47	9,081 17	43 32	4,194 72	8,191 98	63,441 66	16,307 20
Crawford	7,195 69	2,423 98	....	877 01	2,485 69	12,982 37	3,891 06
Delta	12,574 45	3,829 69	....	5,502 24	7,194 70	29,101 08	4,384 99
Eaton	44,773 47	10,142 08	....	8,697 99	10,300 19	73,913 73	16,257 75
Emmet	12,908 26	1,588 97	1 75	3,352 38	3,567 56	21,418 92	2,661 17
Genesee	60,680 00	4,180 49	459 24	15,098 87	16,140 70	96,559 30	12,934 27
Gladwin	4,144 30	1,969 89	....	450 25	2,265 68	8,830 12	1,213 66
Grand Traverse	18,966 10	5,628 17	....	5,664 78	4,410 63	34,699 68	3,969 97
Gratiot	35,161 38	3,984 08	176 77	4,926 85	7,678 83	51,927 91	24,470 35
Hillsdale	46,553 72	4,709 78	269 24	2,990 96	10,899 88	65,423 58	10,517 50
Houghton	52,875 75	4,020 55	506 83	1,559 58	29,215 81	88,178 52	61,127 77
Huron	30,088 74	2,218 43	41 78	4,516 78	8,978 73	45,844 46	10,736 86
Ingham	52,281 17	7,886 20	450 08	8,647 15	20,388 60	89,653 20	13,471 51
Ionia	51,532 78	8,372 05	136 43	7,464 86	11,032 86	78,538 98	16,255 69
Iosco	13,555 30	4,078 04	381 00	3,517 82	4,812 82	26,344 98	2,404 66
Isabella	24,155 82	3,604 02	10 00	3,496 87	6,834 92	38,101 63	8,429 03

TABLE VII.—*Continued.*

Counties.	Paid Teachers.	Paid for Building and Repairs.	Paid for Library Books and care of Library.	Paid on Bonded Indebtedness.	Paid for all other Purposes.	Total Expenditures for the Year.	Amount on hand Sept. 7, 1885.
Jackson	$72,853 81	$17,735 34	$317 77	$4,019 80	$19,059 41	$113.986 13	$18,182 86
Kalamazoo	60,848 41	25,104 43	1,783 52	9,270 27	17,517 92	114,524 55	15,893 24
Kalkaska	11,516 71	6,197 74	50 00	883 65	3,991 85	22,639 95	4,946 09
Kent	143,396 81	58,788 20	6,406 01	21,035 62	90,283 61	319,910 25	42,076 69
Keweenaw	8,470 50	277 25	57 84	....	2,224 80	11,030 39	4,213 35
Lake	11,937 15	1,245 48	....	1,687 09	3,277 12	18,146 84	6,215 06
Lapeer	43,802 24	4,767 80	107 35	4,376 55	8,646 65	61,700 59	10,204 67
Leelanaw	10,014 27	1,498 80	....	1,131 37	1,633 25	14,277 69	2,914 56
Lenawee	76,070 65	5,587 45	854 07	6,554 91	16,949 80	106,016 88	18,119 24
Livingston	32,669 27	4,510 54	79 42	5,250 76	7,431 93	49,941 92	10,024 95
Mackinac	8,661 25	2,390 40	155 95	2,905 53	3,396 78	17,509 91	3,384 16
Macomb	40,065 45	14,801 41	467 37	6,806 03	10,428 36	72,568 62	16,650 78
Manistee	28,967 75	14,495 47	92 00	6,162 76	11,315 24	61,033 22	14,927 53
Manitou	1,040 00	173 94	67 00	49 55	516 60	1,847 09	104 30
Marquette	52,917 36	15,876 76	496 36	16,644 50	24,465 49	110,400 47	20,724 14
Mason	22,285 75	3,275 29	232 78	3,194 27	5,709 46	34,697 55	5,717 17
Mecosta	31,292 87	11,418 09	242 04	5,615 43	10,126 14	58,694 57	20,856 57
Menominee	25,568 65	8,956 56	....	8,977 98	15,303 59	58,806 78	13,734 72
Midland	15,457 94	2,392 16	60 11	4,275 57	4,788 63	26,974 41	6,044 44
Missaukee	8,981 99	2,558 53	4 00	2,333 96	4,801 60	18,680 08	6,574 35
Monroe	38,125 50	9,835 34	254 58	3,191 25	7,557 22	58,963 89	10,451 62
Montcalm	49,981 71	5,398 67	109 39	1,720 35	11,422 26	68,632 38	22,458 61
Montmorency	3,600 60	1,206 20	....	141 88	1,263 04	6,211 72	2,693 78
Muskegon	61,774 16	32,003 66	1,608 89	6,523 11	16,282 58	118,192 40	18,042 06
Newaygo	27,386 93	7,555 31	....	4,056 92	5,584 87	44,584 03	15,765 64
Oakland	64,206 35	5,429 65	332 92	6,434 59	17,693 52	94,097 03	10,586 57
Oceana	23,386 09	3,241 08	1 50	754 32	4,887 92	32,270 91	8,989 02
Ogemaw	8,186 63	1,806 59	....	894 90	2,569 69	13,457 81	3,572 57
Ontonagon	10,417 50	1,859 34	....	200 00	2,867 16	15,344 00	6,978 83
Osceola	23,541 00	5,249 94	101 10	3,122 92	6,754 07	38,769 03	7,946 90
Oscoda	2,499 67	1,157 42	....	726 46	501 23	4,884 78	1,100 23
Otsego	8,917 57	1,274 20	5 00	2,141 96	2,596 73	14,945 46	3,059 33
Ottawa	52,529 00	5,194 68	417 19	5,411 87	14,286 14	77,838 88	14,147 50
Presque Isle	4,264 52	1,235 20	212 21	50 00	1,327 45	7,089 38	862 48
Roscommon	3,313 50	674 84	....	24 17	939 37	4,951 88	2,077 43
Saginaw	95,686 81	37,165 83	2,027 39	10,584 51	31,444 44	176,908 98	39,286 49
St. Clair	57,210 08	9,910 27	89 21	4,035 48	11,158 49	82,403 53	29,623 57
St. Joseph	48,281 28	12,264 24	175 97	4,698 21	13,823 70	79,243 40	10,161 91

TABLE VII.—*Continued.*

Counties.	Paid Teachers.	Paid for Building and Repairs.	Paid for Library Books and care of Library.	Paid on Bonded Indebtedness.	Paid for all other Purposes.	Total Expenditures for the Year.	Amount on hand Sept. 7, 1885.
Sanilac	$37,061 91	$3,058 15	$2 02	$5,535 55	$8,062 60	$53,720 23	$12,309 24
Schoolcraft	4,596 25	2,398 54	....	650 00	1,288 73	8,933 52	4,567 43
Shiawassee	42,441 75	16,414 11	167 54	6,468 28	9,431 58	74,923 26	14,308 30
Tuscola	40,009 18	16,408 30	88 77	6,966 43	10,064 82	73,537 50	15,603 48
Van Buren	50,056 51	4,253 88	125 14	6,559 29	12,243 54	73,238 36	13,423 37
Washtenaw	80,068 32	12,287 35	857 22	3,546 66	19,868 82	116,628 37	11,882 57
Wayne	245,683 30	106,021 06	13,055 34	18,350 84	64,524 18	447,634 72	84,922 24
Wexford	18,312 41	5,080 36	167 73	4,483 53	5,964 03	34,008 06	6,837 57

TABLE VIII.

Miscellaneous Financial Statistics, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	Bonded Indebtedness of the Districts.	Total Indebtedness of the Districts.	Amount due the Districts.	Amount Received by the Districts for Non-resident Tuition.	Amount paid and due Inspectors and members of School Boards for Services.	Amount paid and due Township Chairmen and officers for Services.
Totals	$1,469,873 42	$1,590,534 87	$154,550 87	$50,023 72	$19,114 94	$27,650 59
Alcona	$1,970 00	$2,882 45	$377 33	....	$80 22	$20 00
Alger	1,300 00	1,370 00	842 49	....	152 00	50 00
Allegan	7,906 54	9,666 52	1,065 93	$1,917 16	338 95	428 95
Alpena	....	812 42	332 28	11 38	156 00	258 00
Antrim	22,545 00	23,055 16	1,204 53	43 55	161 65	127 00
Arenac	1,333 00	1,626 00	500 75	11 55	73 25	264 30
Baraga	4,800 00	4,809 00	....	....	35 00	....
Barry	40,713 03	42,430 35	1,025 77	939 83	324 75	414 50
Bay	5,600 00	13,613 55	2,115 99	170 20	152 50	370 25
Benzie	2,885 00	4,024 53	1,236 47	16 03	91 75	158 00
Berrien	32,321 65	33,163 85	6,921 22	1,079 43	304 00	275 75
Branch	16,078 20	16,420 55	1,325 68	1,510 86	265 75	479 50
Calhoun	73,274 90	74,424 93	1,041 28	2,339 94	402 05	659 37
Cass	9,956 16	12,474 70	1,536 91	444 94	311 77	398 42
Charlevoix	10,564 00	11,786 45	1,677 73	34 50	189 25	123 51
Cheboygan	10,858 00	11,828 09	1,250 48	32 75	143 14	85 56
Chippewa	8,312 43	9,949 58	741 33	2 75	185 80	50 50
Clare	2,486 00	2,878 39	2,960 24	21 12	88 00	32 00

TABLE VIII.—*Continued.*

Counties.	Bonded Indebtedness of the Districts.	Total Indebtedness of the Districts.	Amount due the Districts.	Amount Received by the Districts for Non-resident Tuition.	Amount paid and due Inspectors and members of School Boards for Services.	Amount paid and due Township Chairmen and officers for Services.
Clinton	$7,896 00	$8,145 40	$1,640 69	$1,041 98	$278 75	$283 00
Crawford	4,322 79	5,193 82	1,232 40	....	115 50	92 25
Delta	28,282 07	29,110 16	1,512 90	....	63 50	167 00
Eaton	34,074 68	35,080 83	2,475 48	1,576 03	578 50	617 00
Emmet	11,476 79	12,061 90	4,186 29	24 00	235 00	127 55
Genesee	116,340 33	117,278 32	403 61	1,778 75	301 75	685 50
Gladwin	3,760 00	4,622 13	2,218 05	....	123 50	68 50
Grand Traverse	7,533 00	8,484 95	1,551 35	264 58	193 18	133 00
Gratiot	52,304 97	53,670 29	2,863 73	552 98	365 25	317 00
Hillsdale	1,045 00	2,642 82	1,187 20	1,430 84	285 50	437 65
Houghton	15,000 00	15,000 00	661 02	590 50	195 50	117 50
Huron	19,025 75	21,043 76	1,176 41	59 90	370 70	290 75
Ingham	63,330 63	67,984 15	1,330 31	1,065 26	336 80	445 80
Ionia	25,803 00	26,319 10	523 39	1,914 39	299 00	332 65
Iosco	7,450 00	9,898 95	4,230 87	14 50	54 25	22 75
Isabella	22,073 25	23,679 03	2,938 94	174 05	254 75	316 05
Jackson	10,615 46	12,652 12	1,513 85	2,064 01	204 68	264 46
Kalamazoo	28,350 00	30,239 09	1,182 85	1,600 24	278 00	566 25
Kalkaska	7,529 00	9,441 35	117 28	36 50	131 31	148 53
Kent	194,325 97	196,622 20	2,913 48	2,408 25	341 25	949 75
Keweenaw	....	....	1,020 51	....	34 00	10 00
Lake	6,238 00	6,376 84	723 38	84 85	168 93	116 45
Lapeer	12,202 00	12,743 65	926 90	1,051 23	309 00	253 75
Leelanaw	2,126 00	2,329 33	1,370 13	7 05	177 25	158 75
Lenawee	12,451 37	14,854 38	2,181 45	1,909 92	522 75	663 35
Livingston	10,842 61	12,234 92	324 90	1,169 76	292 05	233 30
Mackinac	10,300 00	11,051 30	1,999 00	3 50	119 72	139 30
Macomb	23,369 35	24,383 36	750 63	1,113 57	278 64	265 25
Manistee	25,455 00	26,833 79	802 76	147 78	162 91	120 41
Manitou	120 00	350 00	559 36	....	39 50	29 56
Marquette	63,200 00	71,358 31	9,359 30	283 40	337 00	385 00
Mason	7,897 50	8,154 95	713 19	66 10	209 50	343 25
Mecosta	15,341 33	16,029 22	4,036 08	140 78	315 75	483 75
Menominee	23,100 00	25,507 07	3,735 08	19 50	245 75	240 50
Midland	5,960 45	9,019 23	7,368 32	50 90	111 25	85 50
Missaukee	1,455 50	4,659 10	1,724 21	....	240 77	125 94
Monroe	21,275 00	23,489 55	670 32	762 59	447 50	504 57

TABLE VIII.—*Continued.*

Counties.	Bonded Indebtedness of the Districts.	Total Indebtedness of the Districts.	Amount due the Districts.	Amount Received by the Districts for Non-resident Tuition.	Amount paid and due Inspectors and members of School Boards for Services.	Amount paid and due Township Chairmen and officers for Services.
Montcalm	$5,293 60	$7,792 39	$7,155 70	$393 96	$356 55	$533 80
Montmorency	1,665 00	2,767 85	4,607 67	97 29	99 48	78 50
Muskegon	44,673 00	48,304 55	2,251 54	286 50	243 10	262 60
Newaygo	11,301 00	12,096 21	6,047 56	148 11	455 85	359 75
Oakland	15,821 44	17,762 93	661 34	2,651 60	440 00	519 00
Oceana	955 80	1,301 31	1,412 72	150 75	341 25	246 00
Ogemaw	940 00	2,162 43	2,829 17	....	149 50	88 50
Ontonagon	....	9 44	....	....	77 50	65 00
Osceola	11,605 00	12,835 42	2,978 82	59 12	310 75	216 00
Oscoda	300 00	1,511 17	1,340 83	....	90 25	55 50
Otsego	3,837 18	4,198 65	179 92	1 00	250 85	135 95
Ottawa	20,782 00	21,921 89	2,807 69	527 18	366 23	520 23
Presque Isle	2,715 00	7,923 15	1,995 28	6 44	157 56	94 26
Roscommon	1,100 00	1,100 00	314 87	59 00	48 50	33 44
Saginaw	25,098 82	30,190 55	5,218 45	401 72	456 20	2,436 52
St. Clair	14,488 10	15,357 93	541 11	280 42	241 00	273 60
St. Joseph	13,441 62	14,122 53	235 82	2,145 31	219 00	355 50
Sanilac	21,623 10	23,913 28	2,995 15	86 27	359 75	358 50
Schoolcraft	1,000 00	1,401 29	158 14	....	78 00	13 50
Shiawassee	37,172 50	37,744 86	1,109 03	981 72	298 00	363 80
Tuscola	23,213 05	25,211 01	3,262 93	442 41	318 87	275 23
Van Buren	14,833 75	16,877 28	1,870 66	1,185 99	252 48	270 48
Washtenaw	17,075 18	19,610 61	1,482 45	5,347 09	384 25	774 88
Wayne	19,547 38	21,589 60	1,056 20	2,747 26	337 50	4,194 25
Wexford	5,614 19	7,066 65	1,755 79	40 90	307 75	379 62

TABLE IX.

Cost per capita of Public Schools of the State for the year ending September 7, 1885.

Counties.	No. Scholars Included in School Census in—		No. Pupils Enrolled in—		Per Capita Cost for Instruction, Based upon School Census in—			Per Capita Cost for Instruction, Based upon the Enrollment in—			Total Expense Per Capita during Year, based upon Enrollment in—		
	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.
Totals.....	279,970	315,782	179,004	232,950	$5 02	$4 36	$4 67	$7 85	$5 09	$6 76	$15 23	$8 59	$11 48
Alcona........	304	890	254	599	$6 41	$6 96	$6 83	$7 68	$10 35	$9 56	$10 18	$15 27	$13 75
Alger..........	....	195	....	145	......	10 64	10 64	......	14 31	14 31	....	42 91	42 91
Allegan.......	3,318	9,311	3,116	7,061	5 63	3 73	4 23	5 99	4 91	5 24	8 57	6 77	7 42
Alpena........	2,582	1,282	1,364	828	4 08	5 91	4 69	7 72	9 15	8 26	15 00	15 45	15 17
Antrim........	771	2,182	686	1,724	7 27	5 62	6 05	8 16	7 12	7 42	34 95	11 41	18 11
Arenac........	....	1,222	....	930	......	5 25	5 25	......	6 89	6 89	....	9 96	9 96
Baraga........	347	486	255	297	7 09	6 97	7 02	9 65	11 40	10 59	20 51	17 04	18 66
Barry..........	1,574	6,332	1,470	5,345	6 09	4 26	4 61	6 46	5 04	5 34	15 96	7 12	9 03
Bay............	10,981	3,775	5,654	1,971	3 56	3 25	3 48	6 92	6 22	6 74	13 23	11 10	12 68
Benzie.........	484	1,009	419	825	7 13	6 16	6 48	8 23	7 53	7 77	10 63	14 02	12 88
Berrien........	5,256	6,872	3,911	5,281	5 71	4 53	5 04	7 67	5 89	6 65	12 95	7 57	9 86
Branch........	2,620	5,368	2,198	4,478	7 36	4 55	5 47	8 77	5 45	6 55	15 20	7 99	10 36
Calhoun.......	5,631	6,253	3,654	5,018	6 05	5 26	5 63	9 32	6 55	7 72	22 23	8 48	14 29
Cass...........	1,448	4,864	1,208	3,915	7 64	5 79	6 22	9 16	7 19	7 67	18 00	9 72	11 67
Charlevoix....	715	2,259	496	1,589	3 98	4 91	4 68	5 73	6 98	6 68	10 82	10 81	10 81
Cheboygan....	830	2,371	465	1,447	4 36	4 58	4 52	7 78	7 51	7 57	15 80	13 02	13 69
Chippewa.....	944	1,599	600	1,055	2 93	3 76	3 46	4 63	5 70	5 31	8 97	10 42	9 90
Clare..........	743	799	563	629	5 08	6 54	5 83	6 70	8 30	7 55	10 86	16 19	13 67
Clinton........	2,069	6,767	1,816	4,974	6 63	4 17	4 76	7 54	5 67	6 18	13 46	7 84	9 34
Crawford......	154	460	157	413	9 07	12 60	11 72	8 90	14 04	12 62	17 88	24 64	22 78
Delta..........	1,365	1,083	517	795	4 67	5 73	5 14	12 33	7 79	9 58	37 59	12 16	22 18
Eaton..........	3,149	6,367	2,775	5,258	5 77	4 18	4 75	6 54	5 06	5 57	13 39	6 98	9 20
Emmet........	1,069	1,500	827	1,039	4 69	5 27	5 02	6 08	7 60	6 92	10 74	12 06	11 48
Genesee.......	4,846	7,085	3,925	5,802	6 18	4 33	5 08	7 63	5 39	6 24	13 87	7 25	9 90
Gladwin	....	509	....	432	......	8 14	8 14	......	9 50	9 59	....	20 44	20 44
Gr. Traverse..	1,232	2,474	941	1,808	5 63	4 87	5 13	7 38	6 66	6 91	17 13	10 27	12 61
Gratiot........	2,036	6,307	1,789	5,166	5 28	3 87	4 21	6 00	4 73	5 20	10 91	6 27	17 48
Hillsdale......	2,668	6,694	2,171	5,488	6 10	4 52	4 97	7 50	5 52	6 08	11 30	7 45	8 54
Houghton.....	8,608	648	5,472	415	5 72	5 65	5 71	8 99	8 81	8 98	15 06	13 85	14 98
Huron..........	2,477	7,039	1,604	4,064	3 76	2 95	3 16	5 81	5 13	5 31	7 68	8 25	8 09
Ingham........	4,954	5,793	3,765	4,605	5 40	4 40	4 86	7 12	5 54	6 25	13 63	8 33	10 71

TABLE IX.—*Continued.*

Counties.	No. Scholars Included in School Census in—		No. Pupils Enrolled in—		Per Capita Cost for Instruction, Based upon School Census in—			Per Capita Cost for Instruction, Based upon the Enrollment in—			Total Expense Per Capita during Year, based upon Enrollment in—		
	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.
Ionia	3,048	6,798	2,616	5,278	$7 10	$4 39	$5 23	$8 28	$5 66	$6 53	$15 93	$6 99	$9 94
Iosco	2,414	674	1,557	493	3 88	6 23	4 39	6 01	8 52	6 61	12 77	13 12	12 85
Isabella	892	4,520	650	3,277	5 23	4 31	4 46	7 17	5 95	6 15	13 52	8 87	9 70
Jackson	6,524	6,324	5,222	4,949	6 49	4 82	5 67	8 10	6 53	7 16	13 38	8 93	11 21
Kalamazoo	5,147	5,158	3,841	3,771	6 33	5 48	5 90	8 48	7 49	7 99	19 98	10 07	15 05
Kalkaska	240	1,285	208	997	8 13	7 44	9 40	9 38	9 60	9 56	30 54	16 34	18 79
Kent	15,948	10,034	11,120	7,434	6 26	4 39	5 54	8 97	5 87	7 73	23 70	7 58	11 85
Keweenaw	451	858	284	600	6 48	6 47	6 47	10 29	9 25	9 59	13 73	11 88	12 36
Lake	792	1,118	607	941	5 31	6 91	6 25	6 93	8 21	7 71	11 05	12 15	11 72
Lapeer	2,966	7,164	2,618	5,509	5 54	3 82	4 32	6 27	4 95	5 39	9 06	6 90	7 59
Leelanaw	399	2,105	253	1,400	4 46	3 91	4 00	7 03	5 88	6 06	8 94	8 58	8 64
Lenawee	5,942	8,210	4,385	6,497	6 16	4 81	5 37	8 35	6 07	6 98	11 65	8 45	9 74
Livingston	1,563	4,907	1,487	4,029	6 38	4 63	5 05	6 70	5 55	5 92	11 60	7 99	9 05
Mackinac	968	589	628	397	5 38	5 86	5 56	8 30	8 69	8 45	18 35	15 08	17 08
Macomb	3,643	7,323	2,529	4,057	4 67	3 14	3 65	6 74	5 67	6 08	16 58	7 55	11 03
Manistee	3,588	2,552	2,128	1,800	4 83	4 56	4 72	8 14	6 47	7 38	20 30	9 96	15 54
Manitou	189	335	80	208	1 85	2 06	1 98	4 38	3 31	3 61	9 50	5 23	6 41
Marquette	8,216	1,252	5,685	904	4 96	9 69	5 59	7 17	13 30	8 03	15 40	25 28	16 77
Mason	1,691	2,342	1,333	1,699	5 69	5 39	5 52	7 25	7 43	7 35	12 57	10 56	11 44
Mecosta	2,082	4,332	1,719	3,153	5 79	4 44	4 88	7 00	6 10	6 42	16 76	9 47	12 05
Menominee	2,982	2,009	2,125	1,349	5 10	5 16	5 12	7 15	7 69	7 36	17 19	16 98	16 93
Midland	786	2,354	621	1,661	5 87	4 61	4 92	7 43	6 53	6 78	15 03	10 62	11 82
Missaukee	....	833	....	725	......	10 78	10 78	......	12 39	12 39	....	25 77	25 77
Monroe	2,911	8,977	1,374	6,138	3 34	3 16	3 27	7 08	4 61	5 07	14 88	6 26	7 72
Montcalm	3,825	7,144	3,347	5,370	5 88	3 85	4 56	6 73	5 11	5 73	9 66	6 76	7 87
Montmorency	....	294	....	217	......	12 25	12 25	......	16 59	16 59	....	28 62	28 62
Muskegon	7,879	3,839	5,192	2,936	5 67	4 45	5 27	8 61	5 82	7 60	18 25	7 94	14 58
Newaygo	1,326	4,469	963	3,470	4 44	4 81	4 73	6 12	6 20	6 18	12 21	9 45	10 06
Oakland	4,261	7,287	3,718	5,758	6 60	4 97	5 57	7 56	6 27	6 78	12 36	8 34	9 93
Oceana	1,082	3,658	990	2,787	5 83	4 94	4 93	6 38	6 13	6 19	8 90	8 42	8 54
Ogemaw	229	904	143	726	3 77	8 10	7 23	6 05	10 08	9 42	7 62	17 04	15 49
Ontonagon	975	102	733	85	8 94	16 66	9 67	11 89	20 00	12 74	17 59	28 79	18 76
Osceola	1,310	3,469	883	2,421	4 91	4 93	4 93	7 28	7 07	7 10	11 00	12 00	11 73
Oscoda	....	413	....	325	......	6 05	6 05	......	7 69	7 69	....	15 03	15 03
Otsego	238	956	185	731	4 80	7 58	7 06	6 17	10 64	9 74	11 28	17 59	16 21
Ottawa	6,215	6,581	4,703	4,747	4 72	3 54	4 11	6 24	4 89	5 56	9 88	6 61	8 24

TABLE IX.—*Continued.*

Counties.	No. Scholars Included in School Census in—		No. Pupils Enrolled in—		Per Capita Cost for Instruction, Based upon School Census in—			Per Capita Cost for Instruction, Based upon the Enrollment in—			Total Expense Per Capita during Year, based upon Enrollment in—		
	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.	Graded School Districts.	Ungraded School Districts.	All the Districts.
Presque Isle...	159	1,189	140	680	$5 66	$2 83	$3 16	$6 43	$4 95	$5 20	$9 71	$8 42	$8 65
Roscommon...	....	403	....	283	......	8 22	8 22	......	11 70	11 70	....	17 50	17 50
Saginaw.......	14,114	9,158	7,878	5,748	4 55	3 43	4 11	8 16	5 47	7 02	16 70	7 88	12 98
St. Clair.......	7,210	10,102	4,674	6,748	3 78	2 96	3 30	5 84	4 44	5 01	8 69	6 04	7 21
St. Joseph.....	3,019	4,787	2,833	3,755	7 98	5 05	6 19	8 50	6 44	7 33	16 54	8 62	12 03
Sanilac........	2,601	9,195	1,847	6,511	3 36	3 08	3 14	4 73	4 85	4 43	6 54	6 39	6 43
Schoolcraft...	883	333	169	218	4 96	8 10	6 42	11 24	12 37	11 82	15 81	28 71	23 08
Shiawassee....	2,592	6,368	2,025	5,038	6 28	4 11	4 74	8 05	5 19	6 01	17 71	7 75	10 61
Tuscola........	2,671	7,763	2,197	5,804	4 83	3 49	3 83	5 87	4 67	5 00	16 15	6 55	9 19
Van Buren....	3,053	6,391	2,544	5,111	6 69	4 64	5 30	8 02	5 80	6 54	12 49	8 12	9 57
Washtenaw...	6,280	6,909	4,445	4,918	7 44	4 82	6 07	10 51	6 77	8 55	15 57	9 64	12 46
Wayne........	62,683	10,351	23,426	6,430	3 41	3 08	3 36	9 12	4 95	8 23	17 20	7 10	15 00
Wexford......	1,306	1,869	827	1,471	4 09	6 94	5 76	6 46	8 81	7 97	19 36	12 23	15 23

TABLE X.

Statistics of Township Libraries, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	No. of Townships using Library Moneys for General School Purposes.	No. of Townships Forfeiting Library Moneys.	No. of Townships Maintaining libraries.	No. of Volumes added to Township Libraries during year.	Whole No. of Volumes in Township Libraries.	Amount Paid for Books and care of Township Libraries.	Amount of Taxes voted for Township Libraries.	Amount of Fines, etc., received from County Treasurers for Township Libraries.
Totals	463	250	537	11,525	109,627	$14,836 86	$4,255 87	$11,263 17
Alcona	....	2	2	18	418	$125 00	....	$4 34
Alger	....	1	2	....	709	....	....	....
Allegan	12	1	9	171	2,379	246 68	....	161 54
Alpena	1	2	4	13	289	19 00	....	34 17
Antrim	3	1	12	123	1,753	218 61	$45 00	16 21
Arenac	5	3	1	....	77	10 00	....	....
Baraga	1	2	2	....	290	....	....	....
Barry	11	3	4	31	1,126	24 28	....	58 28
Bay	1	2	11	40	2,009	119 50	....	80 18

TABLE X.—*Continued.*

Counties.	No. of Townships using Library Moneys for General School Purposes.	No. of Townships Forfeiting Library Moneys.	No. of Townships Maintaining Libraries.	No. of Volumes added to Township Libraries during year.	Whole No. of Volumes in Township Libraries.	Amount Paid for Books and care of Township Libraries.	Amount of Taxes voted for Township Libraries.	Amount of Fines, etc., received from County Treasurers for Township Libraries.
Benzie	1	1	10	153	1,165	$219 34	$50 00	$245 61
Berrien	10	3	9	381	3,294	557 54	430 00	116 16
Branch	10	3	3	301	1,175	239 41		146 75
Calhoun	15	2	7	93	583	78 27		150 11
Cass	9	3	6	209	1,724	240 70		120 97
Charlevoix	6	2	8	132	1,020	175 39	5 00	17 35
Cheboygan	6	3	7	29	654	141 61	50 00	207 85
Chippewa	3	3	4	37	92			329 35
Clare	2	2	6	1	683	56 50	50 00	30 91
Clinton	15	1	3	50	467	35 11		110 90
Crawford	1	5	4	93	366	168 19	344 89	59 37
Delta	4	5	4	20	488		60 87	
Eaton	5	2	10	547	2,900	420 76	125 00	211 51
Emmet	2	3	8	75	1,022	140 11		28 55
Genesee	13	4	2	10	265	47 09		80 58
Gladwin	2	6					27 53	
Grand Traverse	2	1	12	734	2,395	771 15		1,194 75
Gratiot	13	4	5		105			18 76
Hillsdale	18	1	4		390	10 00		150 76
Houghton	2	1	4	303	2,644	467 74	50 00	429 87
Huron	11	6	11	67	1,368	103 47	70 00	149 44
Ingham	13	3	1					19 83
Ionia	12	4	6	4	233		14 90	33 97
Iosco	2	4	5	209	1,244	325 10	37 00	243 46
Isabella	4	2	10	24	925	66 79		71 67
Jackson	16	2	2	21	690	24 95		131 26
Kalamazoo	13		5	384	1,563	254 70		646 65
Kalkaska	4	4	6	16	267	30 63	50 00	57 80
Kent	12	3	10	253	3,412	361 57		359 20
Keweenaw	1	3	4		1,534	25 00		32 72
Lake	2	1	11	125	1,520	264 46	235 00	4 68
Lapeer	11	3	9	58	1,378	102 18		76 17
Leelanaw		1	10	254	1,664	254 44		73 74
Lenawee	10	5	10	137	8,587	201 29		152 69
Livingston	11	2	3	20	1,252	32 00		29 47
Mackinac	1	4	4	165	605	321 80	75 00	256 00

TABLE X.—*Continued.*

Counties.	No. of Townships using Library Moneys for General School Purposes.	No. of Townships Forfeiting Library Moneys.	No. of Townships Maintaining Libraries.	No. of Volumes added to Township Libraries during year.	Whole No. of Volumes in Township Libraries.	Amount Paid for Books and care of Township Libraries.	Amount of Taxes voted for Township Libraries.	Amount of Fines, etc., received from County Treasurers for Township Libraries.
Macomb	4	5	8	53	1,440	$84 70	....	$73 04
Manistee	1	2	10	96	1,692	220 06	....	439 60
Manitou	1	2	....	....	....	....	$45 00	....
Marquette	5	6	8	39	1,660	209 00	....	3 60
Mason	3	1	13	230	2,762	275 09	18 38	332 59
Mecosta	7	3	8	281	943	249 37	107 60	287 45
Menominee	1	4	6	578	2,553	996 69	600 00	....
Midland	....	7	8	....	513	23 00	....	27 27
Missaukee	1	3	9	171	670	224 96	75 00	6 54
Monroe	3	1	12	334	2,172	317 61	....	221 14
Montcalm	7	2	13	197	1,786	250 93	10 00	102 69
Montmorency	....	2	2	....	173	41 75	50 00	20 00
Muskegon	3	1	15	666	3,040	389 04	518 83	192 22
Newaygo	4	4	16	310	1,950	449 13	....	292 68
Oakland	16	6	4	76	1,162	69 85	100 00	54 35
Oceana	....	1	15	515	2,870	492 25	199 00	216 60
Ogemaw	4	8	2	10	150	....	....	34 24
Ontonagon	....	5	....	....	....	....	....	....
Osceola	4	1	10	214	1,631	323 37	....	98 16
Oscoda	2	6	1	228	228	228 84	300 00	....
Otsego	2	2	6	80	1,407	292 95	....	204 64
Ottawa	3	2	12	327	2,769	311 51	....	214 30
Presque Isle	4	4	4	9	125	25 00	....	11 30
Roscommon	4	....	2	355	355	341 90	....	392 72
Saginaw	12	5	13	98	3,910	304 44	240 00	164 26
St. Clair	7	8	9	206	2,516	205 43	....	84 15
St. Joseph	9	2	4	21	1,530	220 20	75 00	71 38
Sanilac	13	5	9	176	1,023	99 37	....	143 37
Schoolcraft	2	2	....	....	100	25 00	....	....
Shiawassee	10	6	3	121	816	15 00	75 00	162 46
Tuscola	8	4	12	160	1,870	241 74	....	145 83
Van Buren	8	3	9	474	2,788	584 17	100 00	83 91
Washtenaw	14	3	7	....	2,065	59 00	....	94 48
Wayne	5	12	5	2	3,025	161 50	....	657 80
Wexford	....	3	12	197	1,209	203 65	21 87	86 82

TABLE XI.

Statistics of District Libraries, as Reported by School Inspectors, for the Year Ending September 7, 1885.

Counties.	No. Districts of less than 100 children reporting Libraries.	No. of Volumes reported in such Libraries.	No. Districts of 100 or more children maintaining Libraries.	No. of Volumes added to last mentioned Libraries during year.	Whole No. Volumes in such Libraries.	Amount paid for support of such Libraries.	Amount of Fines, etc., received from County Treasurers for such Libraries.
Totals	933	50,201	294	15,349	211,841	$33,419 92	$16,804 98
Alcona	....	....	....	....	....	....	....
Alger	1	200	....	....	....	....	....
Allegan	52	1,840	16	115	1,690	$72 38	$102 88
Alpena	....	....	4	440	2,176	571 13	371 42
Antrim	2	49	1	50	162	....	....
Arenac	7	230	2	....	93	....	....
Baraga	2	204	2	62	369	50 00	....
Barry	8	176	3	150	1,161	253 64	435 65
Bay	2	263	6	884	11,366	130 89	47 06
Benzie	....	....	....	....	....	....	....
Berrien	22	577	8	315	2,079	277 27	75 24
Branch	25	923	1	....	225	....	19 81
Calhoun	42	1,901	5	638	12,794	591 79	475 71
Cass	44	1,804	4	64	992	94 60	75 12
Charlevoix	2	4	....	....	....	....	....
Cheboygan	....	....	1	....	16	....	54 96
Chippewa	1	14	1	....	36	....	....
Clare	1	4	1	....	72	....	....
Clinton	10	200	7	31	282	14 32	60 28
Crawford	2	13	....	....	....	....	....
Delta	....	....	1	....	579	....	....
Eaton	1	12	2	....	270	....	....
Emmet	5	6	1	....	30	....	....
Genesee	26	921	6	87	4,817	424 59	269 68
Gladwin	....	....	....	....	....	....	....
Grand Traverse	4	215	....	....	....	....	....
Gratiot	10	289	4	132	628	160 77	62 55
Hillsdale	32	759	3	95	410	222 12	149 82
Houghton	....	....	6	305	2,224	406 83	247 30
Huron	1	5	8	17	592	26 43	35 87

TABLE XI.—*Continued.*

Counties.	No. Districts of less than 100 children reporting Libraries.	No. of Volumes reported in such Libraries.	No. Districts of 100 or more children maintaining Libraries.	No. of Volumes added to last mentioned Libraries during year.	Whole No. Volumes in such Libraries.	Amount paid for support of such Libraries.	Amount of Fines, etc., received from County Treasurers for such Libraries.
Ingham	9	183	5	27	3,836	$417 88	$230 49
Ionia	10	193	4	26	123	36 48	117 83
Iosco			2	449	549	381 00	
Isabella	8	199	1	6	50		
Jackson	32	1,557	10	221	6,044	251 68	357 88
Kalamazoo	60	3,375	6	688	11,925	1,510 30	1,251 45
Kalkaska	9	459	1		183	50 00	23 49
Kent	17	523	9	1,631	18,009	6,353 26	1,344 84
Keweenaw	2	626	1	5	1,000	19 69	19 05
Lake							
Lapeer	16	611	8	121	1,127	99 10	57 49
Leelanaw	1	9					
Lenawee	72	3,537	12	666	7,460	781 54	581 75
Livingston	10	340	1	80	100	78 42	5 67
Mackinac			1	95	301	155 95	220 95
Macomb	12	319	10	288	2,850	444 21	39 01
Manistee	8	408	3		3,200	81 00	614 20
Manitou	1	50	1		45	15 00	
Marquette			6	261	4,151	496 36	219 44
Mason	1	21	1	200	1,400	232 78	489 87
Mecosta	6	141	3	40	1,845	194 03	153 73
Menominee	3	129					
Midland	8	376	3	92	932	55 11	29 78
Missaukee	6	151					
Monroe	4	69	2	20	2,105	240 17	206 57
Montcalm	8	210	5	16	769	46 43	100 12
Montmorency							
Muskegon	1	118	3	516	4,083	1,608 89	172 98
Newaygo	5	420					
Oakland	32	1,654	4	313	1,001	287 54	19 31
Oceana	3	209	1		75		
Ogemaw							
Ontonagon	4	464	2		1,412		
Osceola	1	40	2	204	221	101 10	
Oscoda							
Otsego	1	50					

TABLE XI.—*Continued.*

Counties.	No. Districts of less than 100 children reporting Libraries.	No. of Volumes reported in such Libraries.	No. Districts of 100 or more children maintaining Libraries.	No. of Volumes added to last mentioned Libraries during year.	Whole No. Volumes in such Libraries.	Amount paid for support of such Libraries.	Amount of Fines, etc., received from County Treasurers for such Libraries.
Ottawa	17	700	11	214	3,102	312 10	188 87
Presque Isle	8	375	1	50	80	60 00	....
Roscommon	....	....	....	....	....	....	....
Saginaw	33	1,483	16	861	11,818	1,971 36	558 36
St. Clair	28	990	10	128	1,655	72 21	221 29
St. Joseph	51	2,332	6	60	2,823	131 53	39 64
Sanilac	9	431	8	5	342	....	19 16
Schoolcraft	....	....	....	....	....	....	....
Shiawassee	9	209	2	116	599	162 54	205 93
Tuscola	11	359	8	50	668	7 36	14 34
Van Buren	19	641	3	112	350	70 00	78 04
Washtenaw	8	213	5	577	3,971	857 22	262 78
Wayne	85	15,329	33	3,601	68,274	12,391 80	6,561 64
Wexford	3	89	1	225	300	167 73	72 17

TABLE XII.

Branches of Instruction, as reported by School Inspectors for the year ending September 7, 1885.

Counties.	Number of Districts in which Instruction is given in—												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Government.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Totals	6,521	6,521	6,126	6,594	6,456	6,142	5,716	2,711	1,844	471	1,736	455	283
Alcona	12	12	12	11	12	9	8	2	1	......	2	......	......
Alger	6	6	6	6	5	3	4	1	......	......	2	......	......
Allegan	189	189	170	188	185	182	170	68	32	5	40	11	9
Alpena	23	23	23	23	22	21	18	6	1	1	3	1	2
Antrim	54	54	53	55	54	53	53	28	12	5	17	5	4
Arenac	22	22	22	22	22	20	21	5	4	......	4	2	......
Baraga	10	10	10	10	10	10	7	2	4	2	3	1	1
Barry	142	142	113	142	142	139	129	72	50	7	35	3	3
Bay	46	46	45	45	45	41	43	9	5	2	15	3	4
Benzie	38	38	34	37	37	34	28	8	6	1	10	2	1

TABLE XII.—*Continued.*

Counties.	Number of Districts in which Instruction is given in—												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Government.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Berrien	149	149	145	149	149	144	130	53	56	10	54	13	6
Branch	119	119	98	119	119	118	110	53	45	6	39	8	2
Calhoun	157	157	145	154	153	149	138	62	78	6	29	10	10
Cass	106	106	106	106	106	104	94	48	43	3	37	5	3
Charlevoix	59	59	57	57	58	54	49	17	4	2	12	7	......
Cheboygan	48	48	48	48	48	41	38	19	9	3	9	3	3
Chippewa	40	40	40	39	38	36	24	8	1	1	6	1	1
Clare	28	28	28	28	28	25	21	8	5	1	8	1	1
Clinton	123	123	119	125	124	118	117	62	34	2	46	12	3
Crawford	36	36	34	34	35	24	25	9	2	4	9	1	......
Delta	26	26	24	26	26	22	18	4	4	3	3	2	2
Eaton	135	135	127	135	134	133	124	63	25	6	36	11	4
Emmet	59	59	58	58	58	51	45	21	10	4	13	1	2
Genesee	153	153	149	153	152	150	144	87	66	5	72	6	3
Gladwin	20	20	18	20	19	17	18	8	1	......	1	......	......
Gr'd Traverse	55	55	55	55	55	54	49	25	10	2	15	3	2
Gratiot	118	118	99	119	118	112	106	44	15	3	17	8	3
Hillsdale	167	167	161	167	167	165	150	50	74	11	33	11	8
Houghton	17	17	17	17	17	16	12	7	6	4	6	5	5
Huron	99	99	96	98	98	86	87	43	20	7	16	8	4
Ingham	123	123	111	123	120	115	112	63	39	12	35	9	4
Ionia	137	137	116	132	131	124	114	59	45	8	27	10	6
Iosco	23	23	20	23	21	18	20	9	8	4	7	5	3
Iron	......	......	......	......	......	......	......	......	......	......	......	......	......
Isabella	94	94	91	94	94	87	85	37	16	1	20	4	1
Isle Royal	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	147	147	144	148	147	144	131	60	62	13	35	13	8
Kalamazoo	132	132	126	131	131	130	124	66	58	7	43	10	5
Kalkaska	48	48	45	48	48	43	44	17	9	......	11	3	......
Kent	191	191	180	193	191	185	171	86	64	12	53	13	7
Keweenaw	10	10	10	10	10	8	10	6	7	......	4	1	1
Lake	42	42	39	42	41	37	36	15	5	2	11	2	1
Lapeer	123	123	121	123	122	122	109	48	28	9	30	10	5
Leelanaw	49	49	49	49	49	42	33	13	6	......	11	1	1
Lenawee	195	195	188	196	196	190	177	94	62	9	47	17	8
Livingston	132	132	125	131	132	131	121	72	61	11	27	6	4

TABLE XII.—*Continued.*

Counties.	Number of Districts in which Instruction is given in—												
	Orthography.	Reading.	Writing.	Arithmetic.	Geography.	English Grammar.	U. S. History.	Civil Government.	Algebra.	Geometry.	Physiology.	Natural Philosophy.	Botany.
Mackinac	24	24	22	21	18	17	12	4	2	......	3	2	......
Macomb	111	111	109	110	112	109	104	70	54	30	57	32	28
Manistee	51	51	45	50	47	45	43	19	8	4	18	4	3
Manitou	4	4	4	4	4	4	2	2	......	......	......	......	......
Marquette	39	39	37	38	39	37	35	13	8	3	10	2	2
Mason	49	49	47	48	48	46	37	22	13	1	20	2	1
Mecosta	92	92	89	91	90	88	85	32	14	1	30	4	2
Menominee	32	32	32	31	32	26	21	7	3	1	5	1	8
Midland	52	52	50	52	52	47	43	20	7	2	11	6	1
Missaukee	34	34	33	33	30	30	26	13	1	......	8	......	......
Monroe	132	132	124	132	131	120	111	43	30	2	25	1	4
Montcalm	125	125	112	125	123	118	111	55	41	7	35	8	8
Montmorency	18	18	18	18	18	16	15	7	......	......	6	......	......
Muskegon	80	80	71	80	77	75	69	32	17	5	22	8	4
Newaygo	94	94	87	93	92	86	85	43	31	1	18	3	8
Oakland	207	207	202	208	205	198	174	105	94	18	57	17	14
Oceana	86	86	85	86	85	82	82	35	7	2	16	2	1
Ogemaw	34	34	34	34	34	31	30	13	2	......	13	2	......
Ontonagon	8	8	8	8	8	8	7	5	5	4	7	3	2
Osceola	77	77	62	77	75	67	66	32	10	9	16	7	8
Oscoda	24	24	19	24	24	19	20	6	3	......	5	......	......
Otsego	34	34	30	34	34	30	27	8	1	......	4	......	......
Ottawa	110	110	105	109	108	109	95	44	28	4	34	9	4
Presque Isle	29	29	29	29	29	26	21	7	1	......	2	......	......
Roscommon	11	11	11	10	11	10	7	4	1	1	2	1	......
Saginaw	139	139	137	141	140	128	117	50	26	5	35	8	5
St. Clair	139	130	131	139	137	133	126	64	47	8	45	9	5
St. Joseph	118	118	103	119	115	113	108	44	49	8	39	9	8
Sanilac	124	124	117	125	124	116	118	71	44	11	42	12	6
Schoolcraft	12	12	10	12	12	7	6	2	1	1	1	1	......
Shiawassee	114	114	103	112	113	108	106	50	24	5	35	11	5
Tuscola	127	127	121	125	125	119	120	59	32	116	35	11	7
Van Buren	137	137	130	139	138	131	121	67	40	7	49	9	6
Washtenaw	150	150	139	149	149	141	120	47	55	11	29	11	9
Wayne	144	144	133	146	145	140	127	61	42	9	26	10	8
Wexford	62	62	60	63	63	55	52	18	10	1	23	2	1

TABLE XIII.

Private and Select Schools and School Apparatus, as Reported by School Inspectors, for the Year Ending September 7, 1885.

Counties.	Private and Select Schools.				Apparatus.		
	No. of Schools.	No. of teachers employed.		Estimated number of pupils.	No. of districts reporting dictionaries.	No. of districts reporting maps.	No. of districts reporting globes.
		Men.	Women.				
Totals	303	262	452	30,458	3,113	1,844	1,496
Alcona	....	....	....	....	3	5	2
Alger	....	....	....	....	3	8	3
Allegan	3	1	2	128	89	34	43
Alpena	8	2	6	1,000	11	37	4
Antrim	1	....	1	20	19	19	18
Arenac	1	....	3	19	5	14	10
Baraga	....	....	....	....	6	5	5
Barry	2	2	....	30	78	18	12
Bay	13	11	13	1,355	20	27	18
Benzie	....	....	....	....	11	15	11
Berrien	6	2	5	171	96	37	40
Branch	....	....	....	....	49	26	18
Calhoun	7	5	12	677	120	40	20
Cass	3	....	3	15	74	20	26
Charlevoix	....	....	....	....	17	11	11
Cheboygan	2	2	5	506	9	9	8
Chippewa	1	....	4	75	4	10	4
Clare	....	....	....	....	10	11	8
Clinton	2	....	2	33	77	24	25
Crawford	....	....	....	....	10	9	6
Delta	2	1	7	423	7	10	7
Eaton	....	....	....	....	42	11	13
Emmet	1	1	....	80	11	4	4
Genesee	5	9	10	375	102	49	27
Gladwin	....	....	....	....	8	11	7
Grand Traverse	2	1	5	77	24	22	18
Gratiot	1	....	1	20	43	24	21
Hillsdale	....	....	....	....	103	35	37
Houghton	4	2	7	550	10	13	13
Huron	12	6	9	740	25	44	29
Ingham	5	6	5	400	63	18	25

TABLE XIII.—*Continued.*

Counties.	Private and Select Schools.				Apparatus.		
	No. of Schools.	No. of teachers employed.		Estimated number of pupils.	No. of districts reporting dictionaries.	No. of districts reporting maps.	No. of districts reporting globes.
		Men.	Women.				
Ionia	3	2	2	130	66	30	23
Iosco					7	13	8
Iron							
Isabella	2	1	1	60	27	20	20
Isle Royal							
Jackson	4	3	10	625	81	55	34
Kalamazoo	6	6	10	500	85	29	23
Kalkaska					21	21	15
Kent	13	4	16	1,235	111	61	55
Keweenaw					6	6	6
Lake					16	12	10
Lapeer					43	25	26
Leelanaw					11	15	9
Lenawee	10	7	11	733	125	65	54
Livingston	1	1		20	40	12	14
Mackinac					3	6	4
Macomb	16	15	6	1,150	62	39	28
Manistee	5	3	9	780	22	28	19
Manitou						1	8
Marquette	4		10	396	20	33	29
Mason	1		1	10	28	24	23
Mecosta	6	2	5	228	37	34	27
Menominee	3		7	168	19	26	23
Midland					11	20	9
Missaukee	1		1	6	13	15	9
Monroe	25	15	22	1,401	44	31	17
Montcalm	3	2	1	50	58	39	38
Montmorency					5	7	4
Muskegon	6	3	5	460	39	29	28
Newaygo	1	1	2	35	32	29	25
Oakland	2	7		110	113	30	24
Oceana					40	25	32
Ogemaw					9	15	9
Ontonagon					7	7	6
Osceola	2	2		65	19	15	14
Oscoda					2	1	1
Otsego					9	12	9

Table XIII.—*Continued.*

Private and Select Schools.				Apparatus.		
No. of Schools.	No. of teachers employed.		Estimated number of pupils.	No. of districts reporting dictionaries.	No. of districts reporting maps.	No. of districts reporting globes.
	Men.	Women.				
3	2	1	90	78	48	39
6	2	6	157	9	17	13
......	......	......	......	1	2	3
15	13	9	1,605	76	65	56
7	7	8	465	8	4	4
1	2	......	30	60	24	28
1	......	1	25	37	30	28
......	......	......	......	2	3	......
1	......	4	30	45	17	19
4	4	......	185	44	23	20
......	......	......	......	75	37	28
7	6	3	310	75	42	28
63	101	201	12,706	82	60	36
......	......	......	......	32	27	23

TABLE XIV.

n and Certification of Teachers, as reported by Secretaries of Boards of School Examiners, for the Year ending September 7, 1885.

No. of Public Examinations.	Whole No. of Applicants for Regular Certificates.	Whole No. of Applicants for Secretary's Special Certificates.	Number of Applicants Receiving Certificates.				No. Licensed without Experience in Teaching.	No. of Applicants having received some Normal Instruction.	No. of Applicants having attended Institutes during the year.	No. of Teachers holding State Certificates.	No. of Teachers holding Normal School Certificates.	No. of legally qualified Teachers in the County.	No. making Teaching a Permanent Occupation.	No. of Teachers' Certificates suspended.	No. of Teachers' Certificates annulled.
			First.	Second.	Third.	Sec's Special.									
470	13,735	2,024	130	504	9,016	1,873	2,178	3,231	5,613	62	224	10,517	3,184	2	4
2	29	24	1	4	10	21	4	3	20	......	......	11	17	....	....
..	......	......	....	....	......	......	......	......	......	......	......	......	......	....	....
9	454	15	4	41	296	11	132	170	185	2	3	397	15	....	....
3	30	31	....	....	20	29	15	9	16	......	......	35	23	....	....
4	124	12	1	3	62	9	25	42	45	......	2	80	71	....	....
4	24	6	2	2	20	6	3	3	20	......	......	20	20	....	....
1	9	7	4	1	4	7	2	......	6	......	1	13	5	....	....
10	255	12	3	11	206	11	53	......	125	......	3	255	50	....	....
4	108	14	1	1	53	11	7	15	58	......	......	57	40	....	....
4	63	16	....	3	42	15	10	25	31	......	......	60	40	....	....

TABLE XIV.—*Continued.*

Counties.	No. of Public Examinations.	Whole No. of Applicants for Regular Certificates.	Whole No. of Applicants for Secretary's Special Certificates.	Number of Applicants Receiving Certificates.				No. Licensed without Experience in Teaching.	No. of Applicants having received some Normal Instruction.	No. of Applicants having attended Institutes during the year.	No. of Teachers holding State Certificates.	No. of Teachers holding Normal School Certificates.	No. of legally qualified Teachers in the County.	No. making Teaching a Permanent Occupation.	No. of Teachers' Certificates suspended.	No. of Teachers' Certificates annulled.
				First.	Second.	Third.	Sec's. Special.									
Berrien.......	7	381	27	3	9	232	17	52	105	165	2	7	282	233	....	....
Branch........	7	285	23	7	68	180	23	79	60	120	2	2	300	......	....	....
Calhoun.......	8	334	43	....	....	240	42	70	62	63	......	3	......	......	....	....
Cass..........	7	254	11	2	2	169	6	48	76	100	......	7	180	87	....	....
Charlevoix....	5	105	6	1	2	73	6	7	26	35	......	......	78	......	....	....
Cheboygan....	5	94	......	1	8	47	......	10	28	34	......	2	56	......	....	....
Chippewa.....	3	54	31	....	2	19	31	4	6	13	2	......	36	30		
Clare..........	8	46	15	....	2	22	13	4	12	17	2	1	38	20	1	1
Clinton........	8	320	60	....	14	180	45	32	90	174	2	2	224	105	....	....
Crawford......	4	55	16	....	2	28	12	6	9	30	......	......	42	11	....	....
Delta*........	...	......	......	....	....	......	......	......	......	......	......	......	......	......	....	....
Eaton..........	7	295	26	....	3	228	21	20	75	175	1	......	232	......	....	1
Emmet........	4	82	35	1	3	43	32	7	11	20	......	2	71	17	....	....
Genesee......	9	240	12	2	14	178	10	40	50	100	1	......	152	25	....	1
Gladwin.......	4	27	8	1	1	17	6	6	3	8	......	......	21	21	....	....
Gr. Traverse.	5	148	18	1	4	78	17	16	74	85	2	3	88	......	....	....
Gratiot........	6	297	75	2	6	162	53	36	76	100	......	2	172	84	....	....
Hillsdale......	9	247	38	4	13	201	41	23	129	102	3	6	248	148	....	....
Houghton....	4	128	22	3	1	53	22	7	9	60	3	14	83	65	....	....
Huron.........	6	197	50	2	15	104	44	20	10	80	......	......	130	45	....	....
Ingham.......	8	340	10	1	12	265	7	30	90	175	......	4	210	170	....	....
Ionia..........	10	330	90	....	7	193	65	58	114	119	3	2	248	100	....	....
Iosco..........	4	51	9	2	3	41	9	11	5	19	......	7	56	56	....	....
Iron..........	...	......	......	....	....	......	......	......	......	......	......	......	......	......	....	....
Isabella.......	6	150	30	1	8	108	25	10	12	50	......	5	132	100	....	....
Isle Royal....	...	......	......	....	....	......	......	......	......	......	......	......	......	......	....	....
Jackson.......	9	512	60	2	8	253	47	60	284	180	1	24	287	230	....	....
Kalamazoo....	10	409	......	....	6	214	51	51	68	152	1	2	......	......	....	....
Kalkaska.....	4	68	15	1	4	32	14	6	2	14	......	......	39	15	....	....
Kent..........	11	403	85	4	20	278	85	27	80	200	......	4	417	210	....	....
Keweenaw....	3	13	4	....	....	7	3	2	1	6	......	1	15	4	....	....
Lake..........	4	65	9	6	....	48	9	2	......	40	......	......	61	20	....	....
Lapeer........	8	347	40	2	1	207	35	34	125	74	......	5	275	180	....	....
Leelanaw.....	4	59	8	....	2	52	8	7	16	42	......	......	66	12	....	....
Lenawee......	18	425	26	2	11	316	21	90	30	140	2	6	415	......	....	....
Livingston....	10	287	26	....	1	184	23	30	100	125	1	4	189	......	....	....

* No report received from Delta county.

TABLE XIV.—*Continued.*

Counties.	No. of Public Examinations.	Whole No. of Applicants for Regular Certificates.	Whole No. of Applicants for Secretary's Special Certificates.	Number of Applicants Receiving Certificates.				No. Licensed without Experience in Teaching.	No. of Applicants having received some Normal Instruction.	No. of Applicants having attended Institutes during the year.	No. of Teachers holding State Certificates.	No. of Teachers holding Normal School Certificates.	No. of legally qualified Teachers in the County.	No. making Teaching a Permanent Occupation.	No. of Teachers' Certificates suspended.	No. of Teachers' Certificates annulled.
				First.	Second.	Third.	Sec's, Special.									
Mackinac....	4	33	14	1	....	21	13	4	11	11	......	......	23	19	....	....
Macomb	5	204	33	....	5	170	33	39	16	90	1	2	178	40	....	....
Manistee.....	4	94	13	....	4	58	13	18	20	31	......	......	62	......	....	....
Manitou......	4	5	2	....	....	3	2	1	......	......	......	......	6	......	....	....
Marquette ...	4	143	44	....	1	54	40	10	25	5	6	8	110	75	....	....
Mason........	4	96	29	1	4	57	24	20	21	48	......	......	70	45	....	....
Mecosta......	6	169	57	....	8	101	57	15	55	85	1	3	......	60	....	....
Menominee ..	4	99	15	2	8	79	13	27	18	58	......	......	74	37	....	....
Midland	3	90	......	....	2	40	47	......	10	59	......	4	106	12	....	....
Missaukee ...	4	51	24	....	1	37	16	1	8	17	......	......	30	10	....	....
Monroe.......	8	319	25	2	17	183	20	75	48	150	......	7	244	150	....	....
Montcalm....	7	278	95	4	6	177	95	48	52	93	1	2	202	......	....	....
Montmor'ncy	4	21	8	....	3	18	8	2	4	6	......	......	22	12	....	....
Muskegon*...	....	......	......	....	....	......	......	......	......	......	......	......	......	......	....	....
Newaygo.....	6	175	81	2	2	105	58	38	14	63	......	2	118	......	....	....
Oakland......	11	417	18	8	13	288	18	132	153	106	......	5	331	......	....	....
Oceana.......	6	18	29	1	....	148	26	20	30	60	......	......	168	10	....	....
Ogemaw	3	33	25	....	....	20	24	10	7	15	......	......	35	14	....	....
Ontonagon...	3	25	8	....	....	12	8	4	1	11	......	5	25	13	....	....
Osceola.......	5	180	12	1	2	113	9	35	23	160	4	3	120	30	....	....
Oscoda.......	5	......	16	....	1	19	13	8	2	2	......	......	26	......	....	....
Otsego........	4	51	23	1	2	22	23	9	12	4	......	......	22	10	....	....
Ottawa.......	7	229	29	2	16	160	26	55	43	95	3	3	209	......	....	....
Presque Isle.	4	18	19	....	1	16	17	14	2	6	1	1	34	2	....	....
Roscommon..	3	11	13	....	1	8	13	6	4	9	......	......	22	......	....	....
Saginaw......	8	211	45	2	3	182	43	39	15	150	......	2	358	......	....	....
St. Clair......	8	308	......	2	13	161	9	......	95	90	2	2	187	......	....	....
St. Joseph....	8	295	44	4	7	260	44	76	90	121	1	6	285	100	....	....
Sanilac.......	8	240	25	2	36	175	25	40	20	50	1	3	240	......	....	....
Schoolcraft...	6	26	8	1	....	13	8	3	16	......	......	......	15	4	....	....
Shiawassee...	7	238	66	2	6	159	56	37	40	78	1	2	170	84	....	....
Tuscola.......	8	258	33	3	8	206	33	56	8	258	......	1	283	......	....	....
Van Buren...	8	600	70	4	6	275	40	92	100	160	1	20	403	60	1	....
Washtenaw..	9	292	3	....	4	242	3	39	36	60	2	21	281	......	....	....
Wayne.......	11	243	14	6	5	198	14	38	101	88	7	......	209	120	....	....
Wexford.....	5	112	19	2	1	71	19	11	26	51	......	1	78	8	....	1

* No report received from Muskegon county.

TABLE XV.

Miscellaneous Statistics, as reported by Secretaries of County Boards of School Examiners, for the year ending September 7, 1885.

Counties.	No. Meetings of Co. Teachers' Associations.	No. Township Teachers' Meetings.	No. Visits to Schools by Secretaries.	No. Visits to Schools by other Examiners.	No. days devoted to meetings of Co. Board.	Amount of per diem Compensation received by Examiners.	Amount received by Secretaries for Services as Secretaries.	Amount received by Secretaries from Applicants for Special Certificates.	Amount Allowed by Supervisors for Stationery, Printing, Postage, etc.	Amount of Institute Fees Collected.
Totals	98	170	613	263	1,107	$13,132 32	$13,546 00	$1,181 75	$1,321 13	$8,166 83
Alcona	5	......	4	......	5	$60 00	$36 00	$6 50	$2 00	$25 50
Alger	......	......	......	......	......	......	......	......	......	......
Allegan	2	6	4	5	20	216 00	370 00	11 00	10 00	250 50
Alpena	......	......	1	......	30	120 00	50 00	22 00	24 81	25 00
Antrim	......	......	3	......	3	240 00	128 00	12 00	......	54 00
Arenac	......	......	......	......	10	12 00	44 00	6 00	......	......
Baraga	......	......	......	3	1	12 00	22 00	......	......	13 50
Barry	3	......	30	......	16	192 00	294 00	5 00	50 00	149 00
Bay	4	......	3	3	12	157 34	92 00	12 00	......	65 50
Benzie	......	......	12	......	10	118 00	74 00	14 00	2 00	41 50
Berrien	......	27	22	12	13	156 00	296 00	10 00	17 50	210 00
Branch	......	......	......	......	10	192 00	264 00	21 00	......	......
Calhoun	1	......	2	......	17	204 00	332 00	32 00	50 73	231 00
Cass	3	......	5	......	17	180 00	234 00	4 50	57 04	183 50
Charlevoix	1	......	......	......	14	168 00	62 00	6 00	......	48 00
Cheboygan	......	......	......	......	38	154 00	98 00	......	......	16 00
Chippewa	......	......	18	6	11	132 00	60 00	17 00	16 00	39 50
Clare	......	......	33	1	16	192 00	80 00	6 00	7 50	19 00
Clinton	1	4	33	15	35	420 00	260 00	40 00	150 00	169 50
Crawford	......	......	8	8	14	258 00	90 00	8 00	13 00	......
Delta*	......	......	......	......	......	......	......	......	......	......
Eaton	3	......	......	......	11	192 00	292 00	16 00	50 00	195 50
Emmet	......	......	3	......	8	60 00	108 00	7 00	......	54 50
Genesee	......	......	12	12	14	68 00	324 00	7 50	45 00	195 00
Gladwin	......	......	......	......	9	144 00	38 00	2 50	......	17 50
Gr. Traverse	......	......	6	......	13	156 00	135 00	17 00	......	67 50
Gratiot	2	4	35	16	16	192 00	244 00	35 00	25 00	164 00
Hillsdale	3	10	18	......	4	248 00	350 00	41 00	17 40	197 50
Houghton	5	......	4	8	13	210 00	40 00	......	2 65	59 00
Huron	......	......	4	10	17	180 00	200 00	25 00	10 00	105 00

---

* No report received from Delta county.

TABLE XV.—*Continued.*

Counties.	No. Meetings of Co. Teachers' Associations.	No. Township Teachers' Meetings.	No. Visits to Schools by Secretaries.	No. Visits to Schools by other Examiners.	No. days devoted to meetings of Co. Board.	Amount of per diem Compensation received by Examiners.	Amount received by Secretaries for Services as Secretaries.	Amount received by Secretaries from Applicants for Special Certificates.	Amount Allowed by Supervisors for Stationery, Printing, Postage, etc.	Amount of Institute Fees Collected.
Ingham	6	12	8	3	2	$216 00	$270 00	$4 00	$80 00	$244 00
Ionia	1	25	......	......	16	192 00	290 00	15 00	46 04	198 00
Iosco	3	......	2	1	1	100 00	46 00	4 50	20 00	32 50
Iron	......	......	......	......	......	......	......	......	......	......
Isabella	......	8	15	5	42	168 00	182 00	25 00	15 00	96 50
Isle Royal	......	......	......	......	......	......	......	......	......	......
Jackson	......	......	7	2	23	228 00	320 00	40 00	16 00	263 50
Kalamazoo	......	......	......	14	2	231 98	292 00	5 00	......	193 50
Kalkaska	3	......	......	......	12	48 00	100 00	15 00	......	49 00
Kent	3	5	56	15	23	600 00	420 00	75 00	70 00	227 00
Keweenaw	1	......	1	......	8	96 00	24 00	......	3 45	8 50
Lake	......	......	5	......	36	144 00	100 00	3 00	3 85	42 50
Lapeer	5	......	10	12	16	192 00	272 00	15 00	15 00	199 00
Leelanaw	2	......	......	......	12	144 00	100 00	6 00	14 50	42 00
Lenawee	4	40	12	20	14	216 00	398 00	10 00	130 00	333 32
Livingston	2	......	......	......	23	276 00	268 00	23 00	23 41	......
Mackinac	......	......	2	......	12	140 00	48 00	18 00	5 00	26 50
Macomb	2	.....	4	......	9	180 00	228 00	26 00	55 17	112 00
Manistee	......	......	......	......	16	158 00	102 00	13 00	......	74 00
Manitou	......	......	......	......	6	72 00	10 00	1 00	1 00	5 00
Marquette	......	......	......	......	12	140 00	75 00	44 00	40 00	76 50
Mason	3	......	16	20	14	168 00	102 00	16 50	18 00	65 00
Mecosta	4	2	3	1	3	214 00	174 00	11 00	6 78	104 50
Menominee	......	......	2	......	21	84 00	56 00	6 00	1 30	47 00
Midland	......	......	......	......	12	150 00	106 00	8 25	......	53 00
Missaukee	......	......	5	......	10	144 00	94 00	6 00	......	29 00
Monroe	......	......	20	......	22	250 00	280 00	2 00	20 00	184 00
Montcalm	......	......	1	......	16	192 00	272 00	93 00	......	189 00
Montmorency	......	......	4	6	14	12 00	50 00	6 00	......	15 00
Muskegon*	......	......	......	......	......	......	......	......	......	......
Newaygo	4	......	18	16	2	324 00	265 00	65 00	......	86 00
Oakland	......	......	2	......	10	192 00	420 00	4 00	......	277 50
Oceana	3	......	4	......	14	168 00	180 00	26 00	55 00	92 00
Ogemaw	......	......	2	......	12	120 00	82 00	21 00	......	23 50
Ontonagon	......	......	......	......	10	116 00	20 00	6 00	11 00	16 00
Osceola	2	......	1	......	42	168 00	162 00	6 00	......	63 50

* No report received from Muskegon county.

TABLE XV.—*Continued.*

Counties.	No. Meetings of Co. Teachers' Associations.	No. Township Teachers' Meetings.	No. Visits to Schools by Secretaries.	No. Visits to Schools by other Examiners.	No. days devoted to meetings of Co. Board.	Amount of per diem Compensation received by Examiners.	Amount received by Secretaries for Services as Secretaries.	Amount received by Secretaries from Applicants for Special Certificates.	Amount Allowed by Supervisors for Stationery, Printing, Postage, etc.	Amount of Institute Fees Collected.
Oscoda	......	......	12	4	7	$64 00	$43 00	......	......	$19 50
Otsego	......	......	6	2	11	132 00	68 00	$12 00	$1 00	19 50
Ottawa	7	......	14	20	16	204 00	234 00	8 00	58 00	117 50
Presque Isle	......	......	7	......	7	92 00	58 00	11 50	......	28 00
Roscommon	......	......	......	......	......	......	......	......	......	......
Saginaw	1	......	5	......	30	360 00	296 00	30 00	......	216 00
St. Clair	2	......	8	10	2	......	300 00	3 00	......	135 00
St. Joseph	......	30	10	5	4	168 00	250 00	18 00	......	195 00
Sanilac	......	......	......	......	6	192 00	256 00	15 00	......	206 50
Schoolcraft	......	......	7	2	4	63 00	......	......	......	15 00
Shiawassee	2	2	7	......	15	180 00	244 00	19 00	45 00	163 50
Tuscola	......	......	3	......	51	204 00	274 00	17 00	3 00	161 00
Van Buren	1	......	11	......	18	216 00	310 00	25 00	12 00	210 50
Washtenaw	......	......	......	......	21	228 00	332 00	3 00	11 00	228 50
Wayne	2	......	64	......	18	336 00	324 00	11 00	40 00	309 00
Wexford	2	......	4	6	13	216 00	132 00	6 00	......	77 00

TABLE XVI.

Graded School Statistics, Compiled from School Inspectors' Reports, for the Year ending September 7, 1885.

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Totals. 440	....	279,970	$7,242,286 00	$1,405,518 23	$77 83	$38 99	$2,726,350 58	$1,238,939 31
Ada	Kent	154	$7,000 00	$840 00	$55 00	$29 00	$1,701 79	$1,500 00
Addison	Lenawee	113	2,000 00	754 00	50 00	23 30	943 92	....
Adrian	Lenawee	2,382	104,000 00	14,809 00	131 00	38 85	19,854 81	....
Albion	Calhoun	930	50,000 00	5,371 00	122 00	32 10	16,656 46	10,800 00
Algonac	St. Clair	362	8,500 00	1,422 50	46 50	28 80	1,833 29	....
Allegan	Allegan	766	10,000 00	4,849 00	100 00	34 99	6,445 05	....
Allen	Hillsdale	135	10,000 00	725 00	55 50	25 00	1,880 66	....
Alma	Gratiot	403	7,000 00	2,000 00	80 00	30 00	3,023 34	15,000 00
Almont	Lapeer	317	15,000 00	1,700 00	80 00	30 00	4,051 72	9,500 00
Alpena	Alpena	2,582	45,000 00	10,530 00	105 00	40 10	20,463 04	....
Ann Arbor	Washtenaw	2,876	160,000 00	23,101 20	154 30	40 80	35,946 46	12,500 00
Armada	Macomb	216	5,000 00	1,597 50	100 00	27 90	2,430 76	75 00
Athens	Calhoun	117	4,000 00	800 80	28 56	27 00	1,048 84	....
Atlantic Mine	Houghton	268	2,000 00	1,250 00	85 00	40 00	1,646 48	....
Attica	Lapeer	228	1,600 00	967 00	60 00	25 10	1,210 99	....
Augusta	Kalamazoo	199	8,000 00	1,705 00	46 00	34 10	4,021 30	5,300 00
Au Sable	Iosco	582	3,500 00	1,900 00	70 00	40 00	2,599 15	....
Bad Axe	Huron	256	4,500 00	1,200 00	60 00	30 00	1,657 71	3,200 00
Baldwin City	Lake	142	4,000 00	873 00	....	109 00	1,121 75	2,500 00

Bangor	Van Buren	254	2,600 00	1,902 00	83 00	32 00	2,226 27	
Bangor Tp. 3 fl	Van Buren	102	2,000 00	576 25	35 89	40 60	694 24	
Bath	Clinton	155	3,000 00	942 25	50 00	27 38	1,506 55	
Battle Creek	Calhoun	2,730	165,000 00	14,530 00	119 60	35 29	34,080 26	51,000 00
Bay City	Bay	7,651	175,000 00	25,192 50	200 00	39 30	52,103 13	5,700 00
Beacon	Marquette	645	25,000 00	4,000 00	100 00	60 00	8,865 21	7,420 00
Bear Lake	Manistee	145	4,000 00	790 00	50 00	35 45	2,180 00	3,000 00
Belding	Ionia	206	6,000 00	1,500 00	90 00	30 00	2,935 84	
Belleville	Wayne	179	10,000 00	1,100 00	70 00	20 00	1,572 74	
Bellevue	Eaton	287	7,000 00	1,397 00	60 00	28 50	3,579 63	1,575 00
Benton Harbor	Berrien	792	20,000 00	4,545 50	100 00	37 19	6,911 00	
Berlin	Ottawa	127	1,000 00	608 80	45 00	28 23	781 50	
Berrien Springs	Berrien	250	9,000 00	1,775 50	77 00	29 80	2,779 68	1,500 00
Big Rapids	Mecosta	1,578	40,000 00	9,115 00	170 00	39 00	24,555 79	8,000 00
Birmingham	Oakland	331	15,000 00	2,111 00	60 00	30 20	3,088 33	
Blanchard	Isabella	140	1,500 00	675 00	40 00	35 00	745 80	
Blissfield Tp. No. 1 fl	Lenawee	213	6,000 00	1,349 00	60 00	24 90	2,180 80	2,000 00
Blissfield Tp. No. 2 fl	Lenawee	206	2,500 00	1,140 00	60 00	30 00	1,572 77	
Bloomingdale	Van Buren	175	4,000 00	960 00	52 50	31 70	1,353 43	3,000 00
Boyne City	Charlevoix	179	6,000 00	630 00		70 00	1,715 07	3,545 00
Breckenridge	Gratiot	121	1,200 00	540 00		30 00	678 13	1,000 00
Breedsville	Van Buren	120	1,200 00	574 00	43 75	28 00	644 68	
Bridgehampton Tp. No. 1	Sanilac	122	800 00	288 00	48 00		324 97	
Bridgeport	Saginaw	118	2,500 00	720 00	50 00	30 00	849 37	
Brighton	Livingston	275	16,000 00	1,870 00	80 00	26 70	2,840 27	
Brockway Centre	St. Clair	246	2,800 00	643 75	43 75	25 00	1,078 19	551 87
Bronson	Branch	304	4,000 00	1,551 25	77 70	29 35	1,879 37	

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Brooklyn	Jackson	215	$12,000 00	$1,710 00	$53 50	$32 00	$2,206 98	....
Brown City	Sanilac	254	1,000 00	584 00	33 70	26 00	760 97	$700 00
Buchanan	Berrien	605	40,000 00	3,218 75	79 80	30 28	8,084 90	10,000 00
Buel	Sanilac	106	600 00	383 65	40 00	18 36	487 81	....
Buena Vista Tp. No. 6	Saginaw	274	3,500 00	800 00	50 00	30 00	1,460 13	....
Burlington	Calhoun	123	3,000 00	774 00	50 00	20 20	1,058 25	....
Burr Oak	St. Joseph	258	15,000 00	1,526 50	69 60	25 00	2,382 67	600 00
Byron	Shiawassee	106	4,000 00	1,006 00	65 00	27 50	1,203 19	....
Cadillac	Wexford	1,105	20,000 00	4,410 00	75 00	36 87	14.833 13	3,500 00
Caledonia	Kent	170	2,000 00	1,000 00	60 00	20 00	1,247 83	....
Calumet	Houghton	2,654	600 00	15,075 50	87 40	53 50	24,905 88	....
Cannonsburg	Kent	118	1,200 00	501 00	....	34 30	596 90	....
Capac	St. Clair	270	10,000 00	1,100 00	60 00	25 00	2,777 59	4,000 00
Carleton	Monroe	183	3,000 00	439 00	44 00	39 00	635 08	....
Caro	Tuscola	630	5,000 00	3,300 00	100 00	32 85	5,596 36	....
Carrollton	Saginaw	342	2,000 00	1,342 50	70 00	32 12	2,583 73	6,000 00
Carson City	Montcalm	284	1,200 00	1,530 00	65 00	29 30	1,880 24	....
Carsonville	Sanilac	214	200 00	589 00	50 00	22 20	716 47	....
Caseville	Huron	261	5,000 00	1,250 00	65 00	30 00	1,676 55	....
Casnovia	Muskegon	103	2,850 00	855 00	60 00	35 00	1,624 36	....
Cass City	Tuscola	247	9,200 00	1,294 00	60 00	30 00	9,750 74	9,078 10
Cassopolis	Cass	332	15,000 00	3,020 00	90 00	35 30	7,204 11	1,700 00
Cedar Springs	Kent	372	20,000 00	2,240 00	80 00	36 00	5,248 95	5,000 00

Central Mine	Keweenaw	803	8,500 00	1,797 50	111 00	44 30	2, 387 78	....
Centreville	St. Joseph	261	18,000 00	2,116 20	80 00	26 82	5,720 33	2,500 00
Ceresco	Calhoun	92	900 00	690 00	46 80	35 00	703 60	....
Charlevoix	Charlevoix	354	4,000 00	1,655 00	88 00	31 44	2,221 36	....
Charlotte	Eaton	1,020	27,000 00	7,763 25	50 00	42 97	12,631 08	2,500 00
Chase	Lake	348	2,500 00	1,750 00	80 00	31 60	2,228 46	750 00
Cheboygan	Cheboygan	611	10,000 00	2,620 00	80 00	36 40	6,061 87	4,000 00
Chelsea	Washtenaw	421	8,000 00	2,800 00	80 00	28 50	3,669 40	....
Chesaning	Saginaw	855	12,000 00	1,972 00	70 00	31 80	4,059 85	5,000 00
Chickaming Tp. 3	Berrien	152	500 00	271 00	....	33 80	360 24	....
Clare	Clare	298	2,500 00	1,324 00	50 00	26 50	2,087 49	230 89
Clarkston	Oakland	159	3,000 00	1,190 00	65 00	27 00	2,018 85	....
Clayton	Lenawee	124	4,000 00	855 00	65 00	30 00	995 26	....
Climax	Kalamazoo	135	2,500 00	750 00	50 00	33 30	1,008 15	....
Clinton	Lenawee	278	6,000 00	1,950 00	75 00	30 00	2,620 95	....
Clio	Genesee	201	500 00	675 00	49 00	30 00	719 20	....
Coldwater	Branch	1,198	61,000 00	9,835 00	91 00	54 90	15,419 75	7,000 00
Coloma	Berrien	156	800 00	525 00	50 00	23 20	680 03	....
Colon	St. Joseph	171	3,000 00	1,240 00	60 00	32 00	2,059 44	500 00
Columbiaville	Lapeer	181	1,000 00	900 00	50 00	40 00	1,182 63	....
Comstock	Kalamazoo	198	10,000 00	1,577 00	66 50	31 20	2,493 50	....
Concord	Jackson	196	7,500 00	1,664 00	88 80	32 00	3,166 69	2,120 00
Constantine	St. Joseph	403	35,000 00	3,647 50	165 00	28 53	5,315 66	....
Coopersville	Ottawa	277	5,000 00	1,485 00	75 00	30 00	2,062 94	660 00
Coral	Montcalm	216	3,000 00	785 50	48 50	30 00	947 97	....
Corunna	Shiawassee	456	28,500 00	3,220 00	100 00	31 60	6,318 45	10,000 00
Covert	Van Buren	164	1,800 00	792 00	60 00	28 00	871 07	....
Croswell	Sanilac	236	4,000 00	830 00	55 50	27 50	1,785 79	3,600 00

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Crystal Falls	Marquette	181	$8,000 00	$1,700 00	$80 00	$45 00	$2,540 07	$8,000 00
Dansville	Ingham	172	3,500 00	1,440 00	60 00	28 00	2,227 06	204 73
Davisburgh	Oakland	73	1,200 00	525 00	38 80	25 00	617 45	....
Davison	Genesee	116	1,000 00	358 00	....	29 80	446 74	....
Dearborn	Wayne	317	2,500 00	870 00	66 00	30 00	1,170 36	....
Decatur	Van Buren	382	15,000 00	2,920 00	88 80	37 30	5,177 82	300 00
Deckerville	Sanilac	328	3,000 00	850 00	50 00	35 00	1,334 85	2,000 00
Deerfield	Lenawee	314	5,000 00	1,478 00	72 20	23 00	1,933 54	100 00
Detroit	Wayne	53,053	1,013,950 00	187,341 50	133 40	58 45	339,151 28	....
Dewitt	Clinton	142	1,000 00	757 50	50 00	27 95	1,073 67	....
Dexter	Washtenaw	370	8,000 00	2,445 00	85 00	27 00	3,071 06	....
Dimondale	Eaton	143	2,000 00	680 00	50 00	35 00	744 38	....
Douglas	Allegan	177	3,000 00	1,340 00	88 80	30 00	1,758 60	....
Dowagiac	Cass	614	20,000 00	4,456 00	60 00	33 20	9,509 42	3,045 00
Drenthe	Ottawa	135	3,250 00	750 00	50 00	25 00	1,563 66	1,800 00
Dryden	Lapeer	169	5,000 00	1,107 00	70 00	25 40	1,345 00	....
Dundee	Monroe	406	20,000 00	2,711 25	80 00	28 52	8,694 80	16,802 50
Eastlake	Manistee	350	3,600 00	1,350 00	....	45 00	2,409 35	1,585 49
East Saginaw	Saginaw	7,734	200,000 00	37,375 24	96 10	42 24	65,165 50	3,050 00
East Tawas	Iosco	457	3,600 00	2,362 30	100 00	29 80	5,614 32	2,000 00
Eaton Rapids	Eaton	645	10,000 00	3,230 00	80 00	30 37	12,728 35	20,500 00
Ecorse	Wayne	243	3,900 00	675 00	50 00	27 50	856 62	....

Edmore	Montcalm	317	2,500 00	1,612 00	70 00	30 40	1,974 08	....
Edwardsburg	Cass	159	2,000 00	1,215 00	65 00	70 00	1,481 12	....
Elk Rapids	Antrim	420	30,000 00	3,737 00	90 00	42 90	21,420 13	15,000 00
Elm Hall	Gratiot	156	2,500 00	754 00	50 00	29 50	1,415 16	1,000 00
Elsie	Clinton	210	1,500 00	954 00	50 00	28 00	1,063 37	17 75
Erie	Monroe	225	4,000 00	675 00	45 00	30 00	1,363 38	2,400 00
Escanaba	Delta	1,120	33,200 00	5,525 00	110 00	40 20	14,473 62	24,940 00
Essexville	Bay	427	7,000 00	1,757 50	75 00	40 30	3,065 53	422 00
Evart	Osceola	444	6,000 00	2,206 20	75 00	36 45	3,022 91	42 09
Fairfield	Lenawee	100	2,500 00	600 00	35 00	25 00	1,080 37	550 00
Farmington	Oakland	142	600 00	875 00	52 50	19 40	1,017 76	30 77
Farwell	Clare	187	4,500 00	1,323 00	75 00	36 00	2,209 79	....
Fennville	Allegan	174	1,600 00	540 00	40 00	30 00	773 10	....
Fentonville	Genesee	861	40,000 00	4,800 00	75 00	36 60	7,481 64	....
Ferryburg	Ottawa	278	2,000 00	1,050 00	60 00	25 50	1,255 12	....
Fife Lake	Grand Traverse	129	5,200 00	669 12	47 20	34 87	4,592 35	3,389 59
Fillmore Centre	Allegan	180	1,000 00	558 00	....	62 00	706 39	....
Fillmore Tp. No. 1	Allegan	136	2,000 00	595 00	45 00	28 50	710 99	10 29
Flat Rock	Wayne	241	12,000 00	1,197 50	59 75	30 00	1,591 23	....
Flint	Genesee	2,410	130,000 00	16,999 42	101 40	37 45	36,637 28	110,820 00
Flushing	Genesee	232	8,000 00	2,050 00	48 30	30 00	2,286 64	....
Forester	Sanilac	172	800 00	490 00	50 00	21 11	611 42	....
Forestville	Sanilac	185	2,000 00	438 00	42 50	20 00	602 38	....
Fort Gratiot	St. Clair	657	8,000 00	2,500 00	75 00	35 00	4,426 91	1,120 00
Fowlerville	Livingston	346	2,500 00	2,140 00	70 00	28 80	2,583 71	....
Frankfort	Benzie	363	4,300 00	2,600 00	90 00	34 00	3,388 36	100 00
Franklin Tp. No. 1	Houghton	342	800 00	1,400 00	75 00	41 60	1,770 60	....
Franklin Tp. No. 2	Houghton	318	2,000 00	1,700 00	80 00	45 00	2,812 28	....

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Franklin Tp. No. 5	Houghton	482	$2,000 00	$1,872 50	$100 00	$41 50	$3,384 32	
Freeland	Saginaw	116	2,000 00	698 75	45 00	24 87	794 07	
Freeport	Barry	119	1,500 00	640 75	40 60	30 52	744 05	
Fremont	Newaygo	412	8,000 00	2,000 00	75 00	31 25	3,625 68	$1,000 00
Gaines Station	Genesee	144	500 00	740 00	50 00	24 00	802 62	
Galien	Berrien	183	4,000 00	1,185 00	66 60	32 50	1,472 91	
Garden	Delta	245	4,000 00	850 00	70 00	40 00	4,961 06	3,240 00
Gaylord	Otsego	238	3,000 00	1,142 00	60 00	33 40	2,067 69	
Girard	Branch	81	2,500 00	570 00	33 30	30 80	684 05	
Gobleville	Van Buren	187	2,500 00	832 50	49 25	22 60	1,018 92	
Goodrich	Genesee	91	2,500 00	597 00	50 00	24 58	714 01	
Graafschap	Allegan	207	2,600 00	766 00	50 00	26 60	2,361 34	1,500 00
Grand Blanc	Genesee	111	2,500 00	585 00	35 00	30 00	660 85	1 61
Grand Haven City	Ottawa	1,930	55,000 00	10,210 00	126 00	38 40	18,896 78	
Grand Ledge	Eaton	400	2,500 00	1,969 00	77 70	30 20	2,461 16	
Grand Rapids	Kent	12,198	597,100 00	80,221 38	126 00	41 45	230,206 53	163,000 00
Grand Rapids Tp. No. 1	Kent	438	6,000 00	1,748 00	80 00	31 60	2,576 16	4,500 00
Grand Rapids Tp. No. 6	Kent	237	2,700 00	821 25		28 31	2,258 94	350 00
Grand Rapids Tp. No. 15	Kent	270	3,500 00	885 00	60 00	28 50	2,035 10	2,950 00
Grandville	Kent	336	10,000 00	2,188 25	67 87	30 95	2,838 22	
Grass Lake	Jackson	224	8,000 00	1,963 15	112 00	29 54	2,701 08	123 38
Grattan	Kent	90	2,000 00	810 00	55 00	35 00	919 86	

Grayling	Crawford	154	5,100 00	1,397 19	75 03	40 05	2,807 81	2,750 00
Green Tp. No. 3	Mecosta	111	1,200 00	689 00	52 08	31 37	1,047 66	41 54
Greenland Tp. No. 1	Ontonagon	98	1,000 00	1,100 00	75 00	35 00	1,397 74	....
Greenland Tp. No. 2	Ontonagon	94	....	1,100 00	75 00	35 00	1,438 26	....
Greenland Tp. No. 2 fl	Ontonagon	56	600 00	937 50	75 00	26 78	1,066 58	....
Greenville	Montcalm	916	40,000 00	7,395 00	97 20	39 20	9,460 97	....
Grindstone City	Huron	235	2,500 00	850 00	55 00	30 00	1,148 78	500 00
Grosse Isle	Wayne	213	3,000 00	1,050 00	50 00	27 50	1,381 31	....
Hadley	Lapeer	120	3,000 00	871 51	55 83	24 60	1,081 87	....
Hamtramck Tp. No. 5	Wayne	931	5,500 00	1,950 00	75 00	40 00	3,200 47	....
Hancock	Houghton	1,228	26,000 00	6,627 75	150 00	50 27	16,182 04	15,000 00
Hanover	Jackson	159	9,000 00	1,755 00	64 60	33 88	2,155 64	....
Harbor Springs	Emmet	322	4,000 00	1,440 00	70 00	30 00	3,210 65	974 00
Harrison	Clare	263	2,500 00	1,125 00	65 00	30 00	1,866 63	....
Harrisville	Alcona	304	4,000 00	1,950 00	64 50	40 00	2,585 24	1,399 64
Hart	Oceana	241	3,000 00	1,750 00	70 00	35 00	2,230 99	....
Hartford	Van Buren	334	5,000 00	2,024 00	83 80	34 00	2,464 92	....
Hartland	Livingston	99	3,000 00	700 00	40 00	30 00	940 27	....
Hastings	Barry	780	40,000 00	5,403 50	57 50	33 71	9,995 38	23,000 00
Hersey	Osceola	173	200 00	1,300 00	70 00	30 00	1,546 22	....
Hesperia	Newaygo	249	4,000 00	1,002 00	50 00	32 45	1,369 45	1,250 00
Highland Station	Oakland	145	1,500 00	732 00	50 00	23 20	926 12	....
Hillsdale	Hillsdale	961	51,000 00	5,989 00	144 00	40 69	9,232 56	....
Holland	Ottawa	1,114	20,000 00	4,875 00	57 50	28 65	8,464 01	15,000 00
Holland Tp. No. 1 fl	Ottawa	148	1,300 00	500 00	....	50 00	619 67	54 88
Holland Tp. No. 9	Ottawa	123	1,500 00	350 00	....	35 00	586 76	280 00
Holland Tp. No. 11 fl	Ottawa	120	700 00	400 00	40 00	....	484 79	....
Holly	Oakland	303	25,000 00	2,700 00	80 00	31 60	4,375 09	1,500 00

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Holt	Ingham	144	$2,000 00	$210 50	$45 00	$27 00	$248 22	....
Homer	Calhoun	326	8,500 00	2,172 50	80 00	30 50	3,646 03	$160 00
Horton	Jackson	115	4,000 00	788 00	55 50	32 00	1,764 05	1,300 00
Houghton	Houghton	1,224	40,000 00	8,698 75	120 00	50 39	13,726 36	....
Howard City	Montcalm	272	4,500 00	1,575 00	70 00	30 17	5,103 37	2,500 00
Howell	Livingston	635	25,000 00	4,060 00	94 26	33 96	9,309 01	8,000 00
Hubbardston	Ionia	196	4,500 00	1,217 50	60 00	30 87	2,845 63	2,500 00
Hudson	Lenawee	420	10,000 00	3,360 00	70 00	32 60	4,467 85	....
Hudson Tp. No. 5	Lenawee	230	4,000 00	1,556 00	77 70	31 70	1,984 28	....
Humboldt	Marquette	229	4,000 00	1,070 00	75 00	40 00	1,604 40	....
Ida	Monroe	142	1,500 00	480 00	....	30 00	542 18	....
Imlay City	Lapeer	442	5,500 00	1,839 38	80 75	25 79	3,790 52	....
Inverness Tp. No. 3 fl	Cheboygan	219	2,200 00	1,000 00	65 00	35 00	1,285 06	....
Ionia	Ionia	1,307	56,000 00	9,094 76	115 00	39 96	20,513 19	9,000 00
Iron Mountain	Menominee	833	18,000 00	4,895 00	100 00	45 80	16,371 04	10,400 00
Ironton	Charlevoix	182	3,000 00	560 00	45 00	25 00	1,428 88	1,100 00
Ishpeming Tp. No. 1	Marquette	157	1,200 00	900 00	....	45 00	1,320 46	....
Ishpeming City	Marquette	2,108	38,000 00	9,752 50	200 00	48 45	20,272 96	5,000 00
Ithaca	Gratiot	458	25,000 00	2,506 00	68 84	30 00	5,569 85	20,605 00
Jackson No. 1, City	Jackson	2,771	125,000 00	20,945 85	142 50	46 05	33,312 53	....
Jackson No. 17	Jackson	2,339	55,000 00	8,837 55	150 00	36 00	15,924 73	3,500 00
Jasper	Lenawee	108	3,000 00	550 00	....	30 50	792 01	....

Jonesville	Hillsdale	480	40,000 00	2,590 00	53 15	37 78	4,100 22	130 00
Kalamazoo	Kalamazoo	3,949	125,000 00	23,216 00	133 30	36 95	58,834 04	20,000 00
Kalkaska	Kalkaska	240	9,000 00	1,950 00	75 00	40 00	6,353 29	5,430 80
Kingsley	Grand Traverse	137	1,000 00	552 50	44 72	30 00	1,143 43	135 00
Kingston	Tuscola	127	1,400 00	330 00	40 00	30 00	832 73	450 00
Laingsburg	Shiawassee	210	5,000 00	1,424 50	58 89	30 00	4,997 79	2,000 00
Lake Linden	Houghton	1,110	4,300 00	8,096 25	73 30	53 60	11,746 42	
Lakeside Tp. No. 3	Muskegon	370	2,500 00	2,275 00	25 00	40 50	3,182 97	
Laketown Tp. No. 1	Allegan	146	600 00	562 00	35 35	11 10	601 38	
Lakeview	Montcalm	283	3,000 00	1,600 00	70 00	30 00	1,960 72	
Lamont	Ottawa	108	3,000 00	639 00	55 00	24 00	790 56	300 00
L'Anse	Baraga	347	10,000 00	2,460 00	80 00	42 50	5,230 13	4,000 00
Lansing	Ingham	2,726	100,000 00	14,552 00	106 60	37 84	30,627 16	51,000 00
Lapeer	Lapeer	840	35,000 00	5,750 00	68 30	30 80	6,774 50	
Lawrence	Van Buren	196	6,000 00	1,697 80	77 70	29 34	2,262 25	
Lawton	Van Buren	247	15,000 00	1,356 00	66 60	24 80	1,749 49	
Leland	Leelanaw	102	500 00	450 00	60 00	30 00	487 56	
Leslie	Ingham	407	15,000 00	2,500 00	95 00	31 00	3,828 83	
Lexington	Sanilac	357	3,000 00	1,640 00	80 00	28 00	2,263 29	
Linden	Genesee	190	5,000 00	1,100 00	60 00	25 00	2,319 26	3,000 00
Lisbon	Ottawa	102	2,000 00	810 00	60 00	30 00	912 65	
Litchfield	Hillsdale	200	2,000 00	1,516 75	64 00	29 64	2,103 46	
Lowell	Kent	788	21,000 00	3,550 00	67 00	27 60	4,741 25	
Ludington	Mason	1,691	22,000 00	9,660 00	85 00	41 45	16,751 49	5,042 00
Luther	Lake	302	6,000 00	1,585 00	66 00	29 83	3,359 79	1,700 00
Lyons	Ionia	196	2,000 00	1,568 00	72 00	34 00	1,799 91	
McBride	Montcalm	281	2,000 00	1,109 33	77 77	36 50	2,162 00	

[illegible]								
[illegible]								
[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]					
Manistee	[illegible]	[illegible]	[illegible]					
Manistique	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
Manton	Wexford	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
Maple Rapids	Clinton	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marcellus	Cass	192	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Marine City	St. Clair	[illegible]	[illegible]	[illegible]	[illegible]	28 00	[illegible]	[illegible]
Marlette	Sanilac	253	3,000 00	1,350 00	80 00	27 76	1,740 82	
Marquette	Marquette	1,982	56,000 00	10,037 50	107 23	40 00	28,756 70	43,300 00
Marshall	Calhoun	1,150	100,000 00	8,715 00	110 00	34 28	18,875 40	10,001 79
Marysville	St. Clair	135	2,500 00	610 00	....	35 80	713 45	....
Mason	Ingham	576	18,000 00	3,093 50	100 00	32 45	4,743 59	....
Mattawan	Van Buren	101	2,000 00	443 80	40 20	31 53	679 00	80
May	Tuscola	150	1,000 00	750 00	50 00	25 00	911 17	....
Mears	Oceana	140	1,200 00	698 00	46 00	28 00	819 02	....
Mecosta	Mecosta	251	2,400 00	1,400 00	70 00	35 00	2,241 75	....
Memphis	Macomb	276	6,000 00	1,260 00	70 00	28 00	1,871 21	....
Mendon	St. Joseph	257	13,000 00	2,125 00	75 00	34 37	3,731 86	1,100 00
Menominee	Menominee	1,610	33,920 00	7,333 00	120 00	41 40	14,988 95	4,000 00

Metamora	Lapeer	145	3,000 00	960 25	54 69	26 00	1,330 56	....
Michigamme	Marquette	309	6,500 00	1,765 00	82 00	31 50	2,732 81	....
Middleville	Barry	253	14,000 00	1,535 00	60 00	30 16	4,788 20	6,600 00
Midland Tp. No. 3	Midland	624	22,000 00	4,056 00	120 00	40 20	8,579 88	2,200 00
Midland Tp. No. 6	Midland	162	2,000 00	560 00	....	35 00	751 57	....
Milan	Washtenaw	255	6,500 00	1,370 00	72 20	26 60	3,053 38	2,500 00
Milford	Oakland	381	16,000 00	2,480 00	56 50	27 00	6,281 30	9,282 75
Millburg	Berrien	100	2,000 00	520 00	50 00	30 00	700 97	....
Millington	Tuscola	231	6,500 00	982 00	60 00	23 90	5,533 83	6,080 00
Monroe	Monroe	1,776	16,000 00	4,500 00	120 00	33 00	7,986 09	....
Montague No. 1	Muskegon	188	1,200 00	900 00	65 00	25 00	1,345 50	....
Montague No. 2	Muskegon	557	19,000 00	3,115 00	124 50	37 54	11,480 74	5,713 00
Morenci	Lenawee	400	12,000 00	1,764 00	70 00	25 20	3,836 52	1,200 00
Morley	Mecosta	142	1,800 00	850 00	50 00	35 00	975 57	....
Morrice	Shiawassee	152	4,500 00	702 00	50 00	27 00	3,322 88	3,081 26
Moscow	Hillsdale	95	800 00	652 50	50 00	22 50	736 20	....
Mt. Clemens	Macomb	1,306	22,800 00	4,160 00	120 00	29 60	5,884 51	....
Mt. Morris	Genesee	181	2,500 00	657 00	45 00	28 00	779 30	....
Mt. Pleasant	Isabella	603	20,000 00	3,477 00	100 00	37 53	7,401 10	12,000 00
Muir	Ionia	213	7,000 00	1,251 00	75 00	32 00	3,888 27	3,500 00
Muskegon	Muskegon	5,458	139,500 00	32,063 00	113 21	49 24	60,418 83	29,500 00
Napoleon	Jackson	150	5,000 00	1,420 00	77 70	31 30	1,768 65	....
Nashville	Barry	298	12,000 00	1,436,98	71 90	34 58	5,814 51	8,000 00
National Mine	Marquette	295	5,000 00	1,275 00	80 00	47 50	1,974 45	1,620 00
Negaunee	Marquette	1,657	15,000 00	6,268 75	73 00	40 78	10,547 70	....
Newaygo	Newaygo	476	4,500 00	2,237 50	100 00	45 27	2,875 80	....
New Baltimore	Macomb	404	24,000 00	1,838 75	70 00	27 77	1,779 40	....

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
New Buffalo	Berrien	210	$4,000 00	$907 50	$60 00	$28 50	$1,335 96	....
Newberry	Chippewa	143	700 00	675 00	....	39 70	2,803 49	$1,268 03
New Groningen	Ottawa	123	1,800 00	505 00	42 50	20 00	865 42	400 00
New Haven	Macomb	229	1,500 00	972 00	60 00	24 00	1,520 61	....
New Holland	Ottawa	194	1,000 00	546 00	45 00	12 00	625 23	....
New Hudson	Oakland	74	6,000 00	450 00	40 00	18 00	649 04	....
New Troy	Berrien	119	5,000 00	820 00	65 00	30 00	1,212 73	....
Niles	Berrien	1,201	20,000 00	9,341 25	110 00	40 22	13,363 24	....
North Adams	Hillsdale	192	10,000 00	1,460 00	72 20	30 00	2,131 72	....
North Branch	Lapeer	239	1,500 00	1,068 75	60 00	29 37	1,297 71	....
North Muskegon	Muskegon	548	13,000 00	2,029 41	100 00	35 19	12,488 49	9,467 26
Northport	Leelanaw	147	2,000 00	650 00	42 20	30 00	771 46	....
Northville	Wayne	325	14,000 00	2,160 00	100 00	29 00	4,729 66	750 00
Norway	Menominee	539	7,000 00	2,988 25	75 00	37 22	5,170 24	....
Nunica	Ottawa	154	2,500 00	634 00	45 00	23 00	634 00	....
Okemos	Ingham	128	2,500 00	605 50	36 60	31 00	757 30	....
Olivet	Eaton	208	7,500 00	825 00	45 00	30 00	2,078 96	6,000 00
Onondaga	Ingham	133	1,000 00	731 25	48 75	24 37	902 27	25 00
Ontonagon	Ontonagon	398	11,500 00	2,690 00	100 00	36 70	4,819 19	....
Opechee	Houghton	415	....	2,147 50	100 00	37 00	3,047 20	....
Orion	Oakland	223	4,000 00	780 00	50 00	28 00	927 55	....
Ortonville	Oakland	124	3,000 00	730 00	55 00	18 00	1,000 91	....

Oscoda	Iosco	894	900 00	2,992 50	67 10	36 00	8,110 87	2,900 00
Osseo	Hillsdale	128	3,000 00	647 77	47 53	24 40	831 87	175 00
Otisville	Genesee	209	4,000 00	890 00	45 00	22 00	1,064 80	
Otsego	Allegan	408	10,000 00	2,600 00	88 80	33 30	3,355 89	
Otter Lake	Lapeer	185	1,200 00	544 60		34 00	868 95	
Overisal	Allegan	124	2,000 00	506 75	52 09	18 00	1,133 01	1,300 00
Ovid	Clinton	478	20,000 00	3,440 00	87 00	27 60	5,496 92	1,000 00
Owosso	Shiawassee	1,298	54,716 00	7,802 00	60 00	35 80	15,661 49	12,000 00
Oxford	Oakland	332	1,000 00	1,900 00	70 00	30 00	2,276 83	
Palmyra	Lenawee	170	3,000 00	709 50	42 60	28 35	886 58	
Palo	Ionia	104	4,000 00	968 25	50 00	29 25	1,108 20	
Paris Tp. No. 1	Kent	109	1,200 00	510 00	40 00	25 00	586 72	
Parma	Jackson	223	14,000 00	1,916 00	61 00	30 25	4,629 84	2,000 00
Paw Paw	Van Buren	360	40,000 00	3,765 00	120 00	36 10	8,978 84	8,813 00
Pentwater	Oceana	430	8,000 00	2,500 00	80 00	34 00	3,945 97	
Perry	Shiawassee	169	4,200 00	1,294 00	70 00	29 70	2,737 21	1,500 00
Petersburg	Monroe	179	6,000 00	922 50	58 06	25 00	1,228 94	
Petoskey	Emmet	747	9,000 00	3,568 35	104 47	31 54	5,675 89	3,500 00
Pewamo*	Ionia	128	1,200 00	1,017 50	54 00	29 58	1,406 25	21 03
Phœnix	Keweenaw	148	3,500 00	1,125 00	75 00	50 00	1,562 70	
Pierson	Montcalm	155	2,000 00	750 00	45 00	30 00	926 70	
Pinckney	Livingston	208	150 00	1,200 00	60 00	30 00	1,585 14	
Pine Run	Genesee	100	1,000 00	504 00	45 00	18 00	556 64	
Pittsford	Hillsdale	105	2,500 00	627 12	48 87	23 75	763 00	
Plainwell	Allegan	467	13,100 00	2,862 00	100 00	31 10	3,776 10	101 66
Plymouth	Wayne	420	15,000 00	2,700 50	80 00	33 34	11,742 81	8,000 00
Pontiac	Oakland	1,187	80,000 00	10,045 25	103 30	34 72	17,487 10	332 99
Port Austin	Huron	403	4,000 00	1,420 00	67 10	30 00	1,874 61	

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Port Crescent	Huron	181	$3,500 00	$790 00	$60 00	$27 00	$965 97	$130 00
Port Hope	Huron	255	2,500 00	857 99	55 00	30 79	990 58	....
Port Huron	St. Clair	3,962	95,900 00	14,340 00	150 00	37 76	19,852 21	....
Portland	Ionia	441	16,000 00	3,434 00	68 40	32 80	5,176 26	9,000 00
Port Sanilac	Sanilac	144	1,500 00	485 00	42 00	21 60	549 58	....
Potterville	Eaton	211	5,000 00	990 00	....	36 60	1,400 88	....
Quincy	Branch	352	12,000 00	2,642 50	56 38	33 21	5,249 74	1,100 00
Quincy Tp. No. 1	Houghton	567	....	2,350 00	100 00	45 00	3,201 18	....
Reading	Hillsdale	252	8,000 00	1,600 00	56 60	30 00	2,027 32	....
Reed City	Osceola	693	6,000 00	2,925 00	90 00	33 75	5,148 32	2,800 00
Reese	Tuscola	240	2,200 00	765 00	50 00	35 00	2,978 98	....
Republic	Marquette	653	12,600 00	4,011 00	113 00	44 57	8,930 14	2,240 00
Richland	Kalamazoo	124	5,800 00	1,121 00	65 00	28 50	3,568 98	2,875 00
Richmond	Macomb	260	8,000 00	1,298 00	66 60	25 66	1,779 12	3,200 00
Riga	Lenawee	214	6,000 00	470 [illegible]	40 00	30 00	943 77	3,500 00
Rochester	Oakland	297	3,000 00	1,760 00	80 00	32 00	2,112 54	....
Rockford	Kent	250	15,000 00	1,700 00	70 00	33 00	4,296 13	9,000 00
Rockland	Ontonagon	329	3,000 00	2,890 00	82 50	41 33	4,154 36	....
Rogers City	Presque Isle	159	2,000 00	900 00	52 94	....	1,360 00	3,500 00
Romeo	Macomb	503	25,000 00	3,825 00	92 50	32 91	23,222 09	16,990 23
Royal Oak	Oakland	168	2,500 00	491 00	45 00	28 60	675 22	....
Saginaw	Saginaw	4,361	110,000 00	17,997 40	112 50	34 60	46,186 99	5,000 00
St. Charles	Saginaw	334	7,000 00	1,432 50	75 00	34 12	8,215 27	5,600 00

St. Clair	St. Clair	740	22,000 00	4,850 00	110 00	32 50	6,862 86	7,148 88
St. Ignace	Mackinac	705	18,500 00	4,029 75	54 79	39 76	10,005 73	9,900 00
St. James	Manitou	189	500 00	350 00	45 00	25 00	760 00	350 00
St. Johns	Clinton	781	13,000 00	5,780 00	120 00	35 23	12,664 74	3,000 00
St. Joseph	Berrien	1,103	41,500 00	4,571 89	50 92	35 16	10,904 51	18,000 00
St. Louis	Gratiot	777	15,000 00	4,162 50	100 00	34 00	7,121 57	8,000 00
Saline	Washtenaw	285	25,000 00	2,484 00	80 00	33 68	3,198 54	130 93
Salt River	Isabella	149	1,500 00	510 00	40 71	32 14	642 79	60 40
Sand Beach	Huron	400	5,000 00	1,675 00	70 00	32 50	2,474 43	1,550 00
Sand Lake	Kent	189	2,500 00	1,138 50	66 66	29 91	1,838 27	1,150 00
Sanilac Tp. No. 2	Sanilac	230	500 00	810 00	60 00	30 00	900 36	....
Saranac	Ionia	257	12,500 00	1,602 00	56 61	32 50	2,000 61	....
Saugatuck	Allegan	361	10,000 00	1,837 50	70 00	28 43	2,479 04	....
Sault Ste. Marie	Chippewa	801	12,000 00	2,100 00	80 00	32 50	2,581 21	3,000 00
Schoolcraft	Kalamazoo	294	24,000 00	2,474 00	88 88	37 20	3,817 23	....
Sebewaing	Huron	359	3,500 00	755 00	50 50	25 00	956 15	....
Shelby	Oceana	271	3,500 00	1,395 00	70 00	36 42	1,817 58	....
Sheridan	Montcalm	291	4,000 00	1,643 00	70 66	34 70	2,200 30	....
Sherwood	Branch	169	3,000 00	902 56	50 00	33 09	1,049 28	114 94
South Frankfort	Benzie	121	2,000 00	850 00	55 55	38 88	1,065 80	400 00
South Haven	Van Buren	431	5,000 00	2,571 30	100 00	28 05	3,628 01	....
South Lyon	Oakland	233	3,600 00	1,355 99	77 77	21 33	2,506 49	2,300 00
Sparta Centre	Kent	234	5,000 00	1,607 50	80 00	32 30	2,453 96	710 00
Spring Lake	Ottawa	749	8,500 00	4,083 00	111 11	36 27	4,754 92	....
Springport	Jackson	132	5,000 00	1,325 00	70 00	31 25	2,155 24	....
Springwells Tp. No. 1	Wayne	1,608	18,600 00	2,850 00	75 00	35 59	4,320 09	800 00
Springwells Tp. No. 2	Wayne	284	2,000 00	1,080 00	55 00	30 00	2,089 94	....
Springwells Tp. No. 4	Wayne	2,865	7,000 00	2,750 00	60 00	31 00	3,959 32	....

TABLE XVI.—*Continued.*

Districts.	Counties.	No. of Children between 5 and 20 years.	Estimated Valuation of School Property.	Amount paid for Superintendence and Instruction.	Average Monthly Wages of Teachers.		Total Expenditures.	Total Indebtedness.
					Men.	Women.		
Stanton	Montcalm	657	$7,000 00	$4,000 00	$110 00	$36 25	$4,992 31	....
Sturgis	St. Joseph	573	30,000 00	4,140 00	110 00	35 76	7,397 31	$1,000 00
Sumner No. 4 fl	Gratiot	121	4,200 00	765 00	45 00	30 00	1,708 76	2,000 00
Sutton's Bay	Leelanaw	150	3,800 00	680 00	50 00	35 00	1,001 75	....
Tawas City	Iosco	481	2,800 00	2,100 00	90 00	40 00	3,553 38	3,165 00
Tecumseh	Lenawee	569	36,000 00	4,700 00	88 12	31 63	6,350 70	....
Tekonsha	Calhoun	163	7,000 00	999 00	55 00	28 00	5,235 60	....
Thornville	Lapeer	100	1,800 00	722 00	60 00	26 00	824 55	32 46
Three Oaks	Berrien	250	5,900 00	1,510 00	77 77	30 00	1,905 24	....
Three Rivers No. 1	St. Joseph	516	20,000 00	4,380 00	120 00	34 77	10,695 94	2,234 84
Three Rivers No. 4	St. Joseph	311	8,000 00	2,160 00	100 00	29 00	5,816 40	2,500 00
Traverse City	Grand Traverse	966	20,000 00	5,720 00	133 33	41 85	10,383 13	1,500 00
Trenton	Wayne	436	2,500 00	1,050 00	50 00	27 50	1,322 61	....
Tuscola	Tuscola	135	1,000 00	750 00	55 00	20 00	923 18	....
Union City	Branch	521	2,500 00	3,785 00	67 50	30 43	9,135 79	5,500 00
Unionville	Tuscola	232	1,500 00	763 00	50 00	24 08	1,084 82	....
Utica	Macomb	358	12,600 00	2,060 00	47 83	32 00	2,800 59	....
Vandalia	Cass	151	10,000 00	1,326 00	70 83	27 54	1,487 07	....
Vassar	Tuscola	576	20,000 00	3,240 00	74 50	32 00	7,101 12	....
Vermontville	Eaton	235	8,000 00	1,300 27	65 00	31 67	1,568 25	....
Vernon	Shiawassee	206	3,000 00	1,350 00	75 00	30 00	1,620 20	....
Vistaburg	Montcalm	153	2,000 00	525 00	40 00	28 00	696 05	857 75

Vicksburg	Kalamazoo	258	6,000 00	1,746 25	59 38	27 31	2,805 55	
Vriesland	Ottawa	188	350 00	700 00	45 00	25 00	853 41	
Wacousta	Clinton	102	1,200 00	618 65	38 73	30 00	781 28	
Waldron	Hillsdale	100	2,000 00	520 00	50 00	27 50	712 64	
Washington	Macomb	91	1,500 00	540 00	40 00	20 00	638 76	
Watervliet	Berrien	135	2,200 00	835 00	60 00	32 77	936 31	
Watrousville	Tuscola	108	500 00	720 00	50 00	30 00	793 11	
Wayland	Allegan	172	5,000 00	1,663 75	100 00	25 45	2,607 65	1,200 00
Wayne	Wayne	392	20,000 00	2,175 00	80 00	27 50	18,551 68	7,000 00
Webberville	Ingham	250	2,500 00	875 00	50 00	25 00	1,126 76	
West Bay City	Bay	2,908	43,800 00	12,150 00	98 33	38 33	19,657 13	2,890 00
West Branch	Ogemaw	229	1,000 00	865 00	55 00	37 77	1,089 52	50 00
White Cloud	Newaygo	189	4,090 00	650 00	55 00	30 00	3,888 57	3,217 86
Whitehall	Muskegon	655	25,000 00	3,420 00	62 22	38 33	4,405 13	
White Pigeon	St. Joseph	269	20,000 00	2,800 00	120 00	32 00	3,743 79	
White Rock	Huron	127	2,000 00	525 00	50 00	25 00	586 87	
Williamston	Ingham	418	15,000 00	2,181 25	72 65	32 00	6,848 74	9,000 00
Woodland	Barry	124	200 00	476 00	40 00	29 50	2,126 59	
Wyandotte	Wayne	1,176	45,000 00	4,980 00	70 00	32 09	6,408 61	
Ypsilanti	Washtenaw	1,638	55,000 00	11,543 75	108 47	34 00	15,154 20	
Zeeland	Ottawa	350	4,000 00	1,176 00	55 00	20 80	2,325 93	500 00
Zilwaukee	Saginaw	480	6,000 00	1,980 00	54 40	31 66	2,381 10	

TABLE XVII.

Financial Statistics of Two Hundred and Forty-Eight Graded Schools, as Reported by Superintendents and Principals, for the School Year 1884-5.

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Addison	$450 00	$304 00	....	$754 00	$150 00	$904 00	$8 10	*$1 62	$9 72
Adrian	1,800 00	12,385 00	$625 00	14,810 00	4,773 17	19,583 17	14 35	4 62	18 97
Albion	1,100 00	4,275 00	....	5,375 00	2,000 00	7,375 00	9 25	3 44	12 69
Allen	500 00	225 00	....	725 00	50 00	775 00	9 66	67	10 33
Alma	800 00	2,000 00	....	2,800 00	1,023 24	3,823 24	5 33	2 73	8 06
Almont	800 00	900 00	....	1,700 00	581 26	2,281 26	9 06	3 10	12 16
Alpena	1,350 00	8,230 00	....	9,580 00	3,500 00	13,080 00	11 15	3 69	14 84
Ann Arbor	2,000 00	19,801 20	1,200 00	23,001 20	7,267 74	30,268 94	14 47	4 57	19 04
Armada	900 00	697 50	....	1,597 50	200 00	1,757 50	12 57	1 58	14 15
Augusta	600 00	1,105 00	....	1,705 00	450 00	2,155 00	14 82	3 91	18 73
Bad Axe	600 00	600 00	....	1,200 00	224 00	1,424 00	6 50	1 20	7 70
Baldwin	560 00	880 00	....	1,440 00	93 75	1,533 75	14 70	95	15 65
Bancroft	600 00	635 00	....	1,235 00	234 42	1,469 42	6 08	1 15	7 23
Battle Creek	1,750 00	11,880 00	900 00	14,530 00	8,934 99	23,469 99	11 08	6 81	17 89
Bay City	2,000 00	23,550 00	600 00	26,150 00	8,967 00	35,117 00	10 92	3 82	14 74
Beacon No. 1	1,000 00	3,000 00	....	4,000 00	4,865 24	8,865 24	12 05	14 35	26 40
Bear Lake	400 00	390 00	....	790 00	....	790 00	8 86	......	8 86
Belleville	700 00	400 00	....	1,100 00	....	1,100 00	8 52	......	8 52
Bellevue	540 00	857 00	....	1,397 00	307 87	1,704 87	7 98	1 76	9 74
Benton Harbor	900 00	3,650 00	....	4,550 00	2,365 50	6,915 50	7 28	3 77	11 03
Berrien Springs	700 00	1,075 50	....	1,775 50	374 18	2,149 68	8 87	1 87	10 74
Big Rapids	1,700 00	7,415 00	....	9,114 00	4,244 49	13,359 49	11 67	5 40	17 07
Birmingham	600 00	1,511 00	....	2,111 60	488 22	2,599 22	8 34	1 93	10 27
Blissfield No. 1 fl.	600 00	749 00	....	1,349 00	223 52	1,572 52	9 24	1 54	10 78
Blissfield No. 2 fl.	560 00	600 00	....	1,160 00	....	1,160 00	10 26	......	10 26
Breckenridge	270 00	270 00	....	540 00	138 13	678 13	5 68	1 45	7 13
Bridgeport	450 00	270 00	....	720 00	128 77	848 77	8 88	1 58	10 46
Brighton	800 00	1,070 00	....	1,870 00	972 07	2,842 07	9 59	4 98	14 57
Bronson	700 00	1,510 00	40 25	2,250 00	313 24	2,563 49	6 35	1 33	7 88
Burlington	450 00	324 00	....	774 00	284 25	1,058 25	7 41	2 75	10 16
ron	650 00	370 00	....	1,020 00	125 00	1,145 00	9 00	1 10	10 10
Ionia	600 00	400 00	....	1,000 00	247 83	1,247 83	5 88	1 45	7 33

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Calumet	$2,150 00	$12,125 50	$800 00	$15,075 50	$9,497 00	$24,572 50	$8 78	$5 54	$14 03
Cannonsburg	240 00	241 00	....	481 00	....	481 00	7 40	......	7 40
Capac	600 00	500 00	....	1,100 00	270 25	1,370 25	8 52	2 09	10 61
Caro	1,000 00	2,300 00	....	3,300 00	2,100 00	5,400 00	8 82	5 61	14 43
Casnovia	540 60	855 00	125 00	1,520 00	118 06	1,638 06	7 84	94	8 78
Carson City	650 00	1,530 00	....	2,180 00	350 24	2,530 24	6 48	2 12	8 60
Cass City	600 00	600 00	....	1,200 00	....	1,200 00	6 06	......	6 06
Cedar Springs	800 00	1,440 00	....	2,240 00	3,180 50	5,420 50	9 78	13 88	23 66
Central Mine	1,000 00	797 50	....	1,797 00	515 38	2,312 88	11 02	3 16	14 18
Charlotte	1,100 00	6,663 25	....	7,763 25	2,039 83	9,703 08	11 36	2 98	14 34
Chase	800 00	950 00	....	1,750 00	492 41	2,242 41	7 57	2 13	9 70
Chelsea	800 00	1,900 00	....	2,700 00	300 00	3,000 00	9 18	1 02	10 20
Chesaning	700 00	1,272 00	....	1,972 00	667 85	2,639 85	8 64	2 92	11 56
Clare	540 00	784 00	....	1,324 00	455 85	1,779 85	6 11	2 12	8 23
Clarkston	650 00	540 00	....	1,190 00	298 85	1,488 85	9 91	2 49	12 40
Clinton	750 00	1,200 00	....	1,950 00	....	1,950 00	9 63	......	9 63
Coldwater	1,400 00	7,914 00	500 00	9,814 00	3,111 08	12,925 08	12 20	3 90	16 10
Colon	600 00	640 00	....	1,240 00	108 24	1,348 24	9 68	84	10 52
Columbiaville	500 00	400 00	....	900 00	282 63	1,182 63	7 50	2 35	9 85
Concord	800 00	864 00	....	1,664 00	322 69	1,986 69	12 60	2 44	15 04
Constantine	1,250 00	2,400 00	....	3,650 00	883 95	4,533 95	11 37	2 75	14 12
Coopersville	675 00	810 00	....	1,485 00	602 74	2,087 74	7 73	3 13	10 86
Corunna	1,000 00	2,220 00	....	3,220 00	....	3,220 00	11 67	......	11 67
Croswell	500 00	330 00	....	830 00	955 79	1,785 79	5 68	6 48	12 16
Crystal Falls	800 00	900 00	....	1,700 00	840 07	2,540 07	14 26	7 29	22 05
Detroit	4,000 00	186,341 50	3,850 00	194,191 50	76,581 65	270,773 15	13 02	5 34	18 36
Dexter	850 00	1,595 00	....	2,445 00	626 06	3,071 06	9 15	2 34	11 49
Douglas	800 00	540 00	....	1,340 00	364 50	1,704 50	10 00	2 72	12 72
Dowagiac	1,050 00	3,406 00	....	4,456 00	4,931 84	9,387 84	12 07	14 59	26 66
Dryden	700 00	420 00	....	1,120 00	100 00	1,220 00	10 09	90	10 99
Dundee	800 00	1,911 25	....	2,711 25	882 34	3,593 59	8 16	2 65	10 81
Eastlake	500 00	850 00	....	1,350 00	394 35	1,744 35	6 55	1 91	8 46
East Saginaw	2,750 00	33,575 24	1,050 00	37,375 24	14,468 47	51,843 71	11 45	4 43	15 88
East Tawas	1,000 00	1,362 30	....	2,362 30	3,252 02	5,614 32	5 48	7 54	13 02
Eaton Rapids	800 00	2,430 00	....	3,230 00	1,428 17	4,658 17	8 90	3 93	12 83
Ecorse	400 00	275 00	....	675 00	147 44	822 44	4 25	82	5 07

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Elk Rapids........	$900 00	$2,800 00	....	$3,700 00	....	$3,700 00	$10 66	....	$10 66
Elsie..............	450 00	504 00	....	954 00	$81 46	1,035 46	6 62	$ 56	7 18
Essexville.........	750 00	1,007 50	....	1,757 00	75 00	1,832 50	10 09	43	10 52
Evart..............	750 00	1,452 00	....	2,202 00	493 00	2,695 00	9 00	2 00	11 00
Fairfield	350 00	250 00	....	600 00	93 84	693 84	6 00	1 20	7 20
Farmers	288 00	....	....	288 00	36 97	324 97	3 84	49	4 33
Farwell...........	675 00	648 00	....	1,323 00	218 99	1,541 99	15 94	2 64	18 58
Fenton	900 00	4,060 00	....	4,960 00	1,356 00	6,316 00	11 12	3 04	14 16
Ferrysburg........	540 00	510 00	....	1,050 00	200 00	1,250 00	5 81	1 10	6 91
Fillmore...........	500 00	270 00	....	770 00	40 00	810 00	6 69	34	7 03
Flint...............	1,500 00	14,801 50	$600 00	16,901 00	5,032 02	21,933 52	11 26	3 35	14 61
Flushing..........	700 00	1,350 00	....	2,050 00	225 00	2,275 00	14 33	1 57	15 90
Forester...........	400 00	165 00	....	565 00	50 00	615 00	4 94	53	5 47
Fowlerville........	700 00	1,440 00	....	2,140 00	360 00	2,500 00	6 10	1 17	7 27
Frankfort..........	900 00	1,700 00	....	2,600 00	447 85	3,047 85	10 97	1 89	12 86
Franklin No. 1..	150 00	1,250 00	....	1,400 00	370 60	1,770 60	8 80	2 33	11 13
Franklin No. 2...	800 00	900 00	....	1,700 00	....	1,700 00	9 09	....	9 09
Franklin No. 5...	1,000 00	872 50	....	1,872 50	722 85	2,595 35	10 40	4 01	14 41
Freeland..........	450 00	250 00	....	700 00	58 00	758 00	11 11	92	12 03
Fruitport	540 00	225 00	....	765 00	143 38	908 38	11 20	1 91	13 11
Girard	300 00	270 00	....	570 00	55 00	625 00	6 33	61	6 94
Grand Haven....	1,500 00	8,410 00	300 00	10,210 00	3,258 00	13,468 00	10 00	3 19	13 19
Grand Ledge.....	700 00	1,275 00	....	1,975 00	460 00	2,435 00	6 97	1 62	8 59
Grand Rapids City............	2,250 00	74,971 38	3,000 00	80,221 38	82,008 65	162,230 03	13 27	13 54	26 84
Grand Rapids No. 1............	800 00	948 00	....	1,748 00	515 00	2,263 00	7 60	2 23	9 83
Grand Rapids No. 15............	600 00	300 00	....	900 00	239 02	1,139 02	9 00	2 39	11 39
Grandville........	875 00	1,313 25	....	2,188 25	649 97	2,838 22	7 70	2 29	9 99
Greenland No. 1.	750 00	350 00	....	1,100 00	304 86	1,404 86	13 58	3 76	17 34
Greenland No. 2.	750 00	350 00	....	1,100 00	338 26	1,438 26	15 71	4 83	20 54
Greenland No. 3 fl..............	750 00	187 50	....	937 50	149 08	1,086 58	23 43	3 72	28 26
Grindstone City.	550 00	300 00	....	850 00	187 98	1,037 98	5 00	1 10	6 10
Grosse Isle........	550 00	525 00	....	1,075 00	300 00	1,375 00	6 93	1 43	8 36
Hancock	1,500 00	6,259 25	367 50	8,126 75	3,718 88	11,845 13	15 36	7 03	22 39
Hanover..........	750 00	1,005 00	....	1,755 00	400 64	2,155 64	13 50	3 08	16 58
Harrison.........	585 00	540 00	....	1,125 00	310 80	1,435 80	8 40	2 32	10 72
....	700 00	1,050 00	....	1,750 00	270 99	2,020 99	8 70	1 39	10 09

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Hastings	$1,000 00	$4,204 50	$210 00	$5,414 50	$1,474 51	$6,889 01	$9 16	$2 59	$11 75
Holland City	1,000 00	3,725 00	150 00	4,875 00	2,200 00	7,075 00	7 21	1 77	8 98
Holland No. 9	350 00	....	....	350 00	236 76	586 76	6 48	4 38	10 86
Horton	500 00	288 00	....	788 00	87 00	875 00	8 27	87	9 14
Houghton	1,500 00	6,510 00	700 00	8,710 00	4,091 14	12,801 14	13 98	6 56	20 54
Howard City	700 00	875 00	....	1,575 00	511 81	2,086 00	9 00	2 92	11 92
Hubbardston	600 00	650 00	....	1,250 00	225 00	1,475 00	13 44	2 41	15 85
Humboldt	750 00	320 00	....	1,070 00	534 75	1,604 75	8 56	4 27	12 83
Inverness	650 00	350 00	....	1,000 00	285 06	1,285 06	10 41	2 96	13 37
Imlay City	807 50	1,025 00	....	1,832 50	440 05	2,272 55	7 82	1 88	9 70
Iron Mountain	1,000 00	3,895 00	....	4,895 00	5,822 70	11,437 70	8 84	10 30	19 14
Ishpeming City	2,000 00	7,752 00	95 00	9,847 00	3,759 47	13,606 47	9 98	3 80	13 78
Ishpeming No. 1	500 00	400 00	....	900 00	420 46	1,320 46	9 67	4 51	14 18
Ithaca	1,000 00	1,508 00	....	2,508 00	3,393 48	5,901 48	7 12	9 64	16 76
Jackson No. 1	1,800 00	18,545 84	600 00	20,945 84	4,999 07	25,944 91	13 57	3 23	16 80
Jackson No. 17	1,500 00	7,337 55	....	8,837 55	7,087 18	15,924 73	9 43	7 56	16 99
Jonesville	700 00	1,890 00	....	2,590 00	1,688 36	4,278 36	13 14	8 57	21 11
Kalamazoo	2,000 00	20,216 00	1,000 00	23,216 00	7,591 08	30,807 08	12 02	3 93	15 95
Kalkaska	750 00	1,200 00	....	1,950 00	299 03	2,249 03	10 77	1 65	12 42
Keelersville	300 00	270 00	....	570 00	56 65	626 65	7 21	70	7 91
Laingsburg	700 00	724 50	....	1,424 50	343 57	1,768 07	12 85	3 12	15 97
Lake Linden	1,200 00	6,196 25	700 00	8,096 25	3,450 17	11,746 42	14 12	6 36	20 48
Lakeside	500 00	1,525 00	250 00	2,275 00	601 60	2,876 60	10 53	2 78	13 31
Lakeview	700 00	900 00	....	1,600 00	370 82	1,970 82	7 27	1 68	8 95
Lamont	495 00	194 00	....	639 00	151 56	790 56	12 28	2 99	15 27
L'Anse	800 00	1,660 00	....	2,460 00	850 13	3,310 13	14 55	5 02	19 57
Lansing	1,700 00	12,852 00	....	14,552 00	6,589 86	21,141 86	11 09	5 02	16 11
Lawton	600 00	756 00	....	1,356 00	161 99	1,517 99	8 17	98	9 15
Leland	300 00	150 00	....	450 00	37 56	487 56	6 64	51	7 15
Lisbon	540 00	270 00	....	810 00	....	810 00	8 43	87	9 30
Litchfield	700 00	786 30	....	1,486 30	363 13	1,849 43	7 37	1 59	8 96
Lowell	900 00	2,650 00	....	3,550 00	810 22	4,360 22	9 64	2 20	11 84
Ludington	1,200 00	8,460 00	....	9,660 00	2,758 77	12,418 77	10 60	2 93	13 53
Lyons	650 00	918 00	....	1,568 00	200 00	1,768 00	12 00	1 64	13 64
McBride	533 33	576 00	....	1,109 33	245 80	1,355 13	5 46	1 21	6 67
Manchester	1,000 00	2,000 00	....	3,000 00	2,349 26	5,349 26	7 83	6 16	13 99

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Manistique	$750 00	$1,200 00	....	$1,950 00	....	$1,950 00	$8 83	......	$8 83
Manton	557 50	380 00	....	937 50	$243 88	1,180 88	10 41	$2 70	13 11
Marcellus	450 00	600 00	....	1,050 00	280 47	1,330 47	8 14	2 10	10 24
Marlette	800 00	550 00	....	1,350 00	390 82	1,740 82	9 12	2 64	11 76
Marquette	1,800 00	8,000 00	$237 50	10,037 50	3,269 20	13,306 70	10 12	3 29	13 41
Marysville	340 00	270 00	....	610 00	126 81	726 81	5 98	1 24	7 22
Mason	1,000 00	2,693 50	....	3,693 50	1,033 71	4,727 21	9 82	2 75	12 57
Mecosta	700 00	700 00	....	1,400 00	457 85	1,857 85	10 52	3 44	13 96
Memphis	700 00	560 00	....	1,260 00	312 41	1,572 41	8 13	2 01	10 14
Mendon	750 00	1,350 00	....	2,125 00	....	2,125 00	10 21	......	10 21
Menominee	1,200 00	6,133 00	....	7,333 00	3,635 70	10,968 70	10 96	5 43	16 39
Metamora	492 25	468 00	....	960 25	370 31	1,330 56	10 32	3 98	4 30
Michigamme	800 00	1,000 00	....	1,800 00	1,025 01	2,825 01	7 72	4 49	12 21
Middleville	600 00	900 00	30 00	1,530 00	300 00	1,830 00	11 68	2 29	13 97
Midland	320 00	240 00	....	560 00	191 57	751 57	7 17	2 54	9 71
Monroe	1,200 00	3,300 00	....	4,500 00	1,507 00	6,007 00	10 61	3 53	14 14
Morenci	630 00	1,134 00	....	1,764 00	617 52	2,381 52	7 38	2 58	9 96
Morley	492 50	357 50	....	850 00	139 57	989 57	5 86	96	6 82
Moscow	450 00	202 50	....	652 50	71 78	624 28	10 87	1 19	12 06
Mt. Clemens	1,200 00	2,960 00	....	4,160 00	1,596 30	5,756 30	8 53	3 29	11 82
Mt. Morris	405 00	252 00	....	657 00	150 00	807 00	6 02	1 37	7 39
Muir	675 00	576 00	....	1,251 00	341 96	1,592 96	8 12	2 22	10 34
Muskegon	1,800 00	29,730 00	1,550 00	33,083 00	9,388 36	42,471 36	13 12	3 71	16 83
Napoleon	700 00	696 00	....	1,396 00	300 00	1,696 00	11 16	2 40	13 56
National Mine	800 00	950 00	....	1,750 00	803 25	2,553 25	9 27	4 48	13 75
Newaygo	750 00	1,500 00	....	2,250 00	210 00	2,460 00	11 33	1 05	12 38
New Buffalo	480 00	907 50	60 00	1,447 50	428 44	1,875 94	12 58	3 72	16 30
New Groningen	425 00	80 00	....	505 00	360 42	865 42	5 94	4 22	10 16
New Haven	540 00	432 00	....	972 00	548 61	1,520 61	5 75	3 24	8 99
New Holland	450 00	96 00	....	546 00	79 23	625 23	4 55	66	5 21
New Troy	520 00	300 00	....	820 00	253 69	1,073 69	10 12	3 13	13 25
Niles	1,300 00	8,041 25	....	9,341 25	4,801 53	14,142 78	13 86	7 12	20 98
North Branch	540 00	540 00	....	1,080 00	283 76	1,363 76	5 83	1 53	7 36
Northville	1,000 00	1,160 00	....	2,160 00	552 24	2,712 24	10 14	2 12	12 26
Norway	750 00	2,252 50	....	3,002 50	1,381 99	4,384 49	9 86	4 56	14 42
Nunica	450 00	184 00	....	634 00	....	634 00	6 78	......	6 78

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
Okemos	$325 00	$311 00	....	$636 00	$121 30	$757 30	$7 66	$1 46	$9 12
Orion	500 00	280 00	....	780 00	25 00	805 00	7 80	25	8 05
Ortonville	550 00	180 00	....	730 00	252 87	982 87	7 44	2 56	10 00
Oscoda	800 00	2,052 50	....	2,852 50	986 06	3,838 56	6 85	2 37	9 22
Osseo	427 77	220 00	....	647 77	186 00	833 77	8 20	2 35	10 55
Otsego	800 00	1,800 00	....	2,600 00	304 68	2,904 68	7 78	90	8 68
Otter Lake	320 00	224 00	....	544 00	124 96	668 96	5 72	1 31	7 03
Owosso	1,300 00	6,002 00	....	7,302 00	2,410 51	9,712 51	10 08	3 33	13 41
Oxford	700 00	1,200 00	....	1,900 00	375 73	2,275 73	11 17	2 21	13 38
Parma	900 00	1,016 00	....	1,916 00	....	1,916 00	9 82	......	9 82
Petoskey	1,050 00	2,490 00	....	3,540 00	1,061 00	4,601 00	9 44	2 82	12 26
Phoenix	675 00	450 00	....	1,125 00	....	1,125 00	15 00	......	15 00
Pierson	450 00	300 00	....	750 00	195 94	945 94	7 28	1 90	9 18
Plainwell	900 00	1,962 00	....	2,862 00	914 45	3,776 45	8 88	2 84	11 72
Plymouth	800 00	1,900 50	....	2,700 50	1,272 23	3,972 73	8 71	4 10	12 81
Pontiac	1,500 00	8,545 25	....	10,045 25	3,723 49	13,768 74	12 75	4 72	17 47
Port Austin	800 00	620 00	....	1,420 00	439 26	1,859 26	11 36	3 51	14 87
Port Cresent	600 00	270 00	$30 00	900 00	100 00	1,000 00	11 25	1 25	12 50
Port Hope	550 00	307 99	....	857 99	122 59	980 58	6 86	98	7 84
Port Huron	1,500 00	14,326 00	....	14,326 00	13,655 79	27,981 79	9 20	8 77	17 97
Portland	1,000 00	2,434 00	....	3,434 00	1,193 64	4,627 64	9 81	3 41	13 22
Port Sanilac	420 00	65 00	....	485 00	58 25	543 25	5 90	71	6 61
Reading	700 00	900 00	....	1,600 00	400 00	2,000 00	9 30	2 32	11 62
Republic	1,320 00	2,698 00	....	4,018 00	2,395 54	6,413 54	9 49	5 40	14 89
Richmond	600 00	693 00	....	1,293 00	486 12	1,779 12	7 00	2 62	9 62
Riley Centre	232 00	160 00	....	392 00	128 00	520 00	5 60	1 82	7 42
Rochester	800 00	960 00	....	1,760 00	300 00	2,060 00	9 16	1 56	10 72
Rockford	700 00	1,000 00	....	1,700 00	342 69	2,042 69	9 71	1 96	11 67
Royal Oak	225 00	266 00	....	491 00	184 22	675 22	6 14	2 30	......
St. Clair	1,100 00	3,250 00	....	4,350 00	2,654 18	7,004 18	11 63	7 09	18 72
St. Johns	1,200 00	4,220 00	360 00	5,780 00	1,378 79	7,158 79	11 57	2 74	14 25
St. Louis	1,000 00	3,165 00	....	4,165 00	600 00	4,765 00	8 70	1 25	9 95
Saline	800 00	1,695 00	....	2,495 00	845 47	3,340 47	12 53	4 25	16 78
Salt River	285 00	225 00	....	510 00	123 44	633 44	4 67	1 13	5 80
Sand Beach	700 00	975 00	....	1,675 00	500 00	2,175 00	8 57	2 59	11 16
Sand Lake	600 00	538 50	....	1,138 50	274 65	1,413 15	8 08	1 94	10 02

TABLE XVII.—*Continued.*

Districts.	Amount paid Superintendent or Principal.	Amount paid Regular Teachers.	Amount paid Special Teachers.	Total Amount paid for Instruction.	Amount paid for Incidentals.	Total Cost of Schools.	Cost per Capita for Instruction.	Cost per Capita for Instruction.	Total Cost per Capita.
Saranac	$675 00	$927 00	....	$1,602 00	$396 77	$1,998 77	$8 43	$2 08	$10 51
Saugatuck	700 00	1,137 50	....	1,837 50	641 54	2,479 04	8 90	2 96	11 86
Sault Ste. Marie	800 00	1,300 00	....	2,100 00	1,869 79	3,969 79	5 55	4 94	10 49
Schoolcraft	800 00	1,674 00	....	2,474 00	1,343 23	3,817 23	10 61	5 77	16 38
Sheridan	540 00	717 00	....	1,257 00	650 00	1,907 00	7 85	4 62	12 47
South Haven	1,000 00	1,593 50	....	2,593 50	641 35	3,234 85	10 09	2 49	12 58
Sparta Centre	800 00	807 50	....	1,607 50	411 46	2,018 96	8 69	2 22	10 91
Springport	700 00	575 00	....	1,275 00	287 63	1,562 63	12 22	2 76	14 98
Springwells, No. 1	750 00	2,100 00	....	2,850 00	1,470 09	4,320 09	7 34	3 78	11 12
Stanton	1,100 00	2,900 00	....	4,000 00	1,200 00	5,200 00	11 08	3 32	14 40
Sturgis	1,042 20	2,826 00	....	3,868 20	1,209 60	5,077 80	10 07	3 15	13 22
Tecumseh	1,200 00	3,500 00	....	4,700 00	1,650 70	6,350 70	11 92	4 19	16 11
Tekonsha	495 00	504 00	....	999 00	255 24	1,254 24	9 00	2 30	11 30
Thornville	540 00	196 00	....	736 00	102 00	838 00	9 20	1 25	10 45
Three Rivers	1,200 00	3,130 00	....	4,330 00	878 37	5,208 37	13 70	2 78	16 48
Three Rivers, No. 4	1,000 00	1,160 00	....	2,160 00	710 51	2,870 51	11 99	3 87	15 86
Trenton	500 00	550 00	....	1,050 00	272 61	1,322 61	5 09	1 32	6 41
Union City	1,250 00	2,510 00	....	3,760 00	1,204 16	4,964 16	11 09	3 55	14 64
Utica	800 00	1,260 00	....	2,060 00	550 00	2,610 00	10 19	2 72	12 91
Vandalia	637 50	688 50	....	1,326 00	110 83	1,436 83	9 27	77	10 04
Vernon	750 00	600 00	....	1,350 00	270 20	1,620 20	8 43	1 69	10 12
Vicksburg	720 00	1,026 25	....	1,746 25	375 27	2,121 52	8 39	1 80	10 19
Vriesland	450 00	250 00	....	700 00	92 08	792 08	7 44	97	8 41
Wacousta	348 65	270 00	....	618 65	162 63	781 28	8 83	2 32	11 15
Waldron	300 00	220 00	....	520 00	192 64	712 64	5 97	2 21	8 18
Washington	360 00	180 00	....	540 00	99 76	639 76	8 30	1 53	9 83
Watervliet	540 00	290 00	....	830 00	95 39	925 39	9 54	1 09	10 63
Wayland	900 00	763 75	....	1,663 75	215 25	1,879 00	7 02	91	7 93
West Bay City, No. 1	1,000 00	1,850 00	....	2,850 00	1,771 20	4,621 20	6 33	3 93	10 26
West Bay City, No. 3	550 00	600 00	....	1,150 00	150 00	1,300 00	6 57	85	7 42
White Cloud	550 00	300 00	....	850 00	69 23	919 23	8 67	70	9 37
White Rock	300 00	225 00	....	525 00	60 00	585 00	7 09	81	7 90
Woodland	240 00	236 00	....	476 00	80 00	556 00	5 15	85	6 00
Wyandotte	1,000 00	3,950 00	....	4,950 00	742 16	5,692 16	9 32	1 40	10 72
Zeeland	550 00	630 00	....	1,180 00	511 00	1,691 00	5 00	2 15	7 15
Zilwaukee	700 00	1,230 00	....	1,930 00	500 00	2,430 00	7 02	1 46	8 48

TABLE XVIII.

Miscellaneous Statistics of Two Hundred and Forty-eight Graded Schools, as Reported by Superintendents and Principals, for the School Year 1884–5.

Districts.	Total Enrollment.	Average Number Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers.	Average No. of Pupils to Each Teacher.	Portion of Superintendent's time given to Supervision.	Number of Pupils Studying—				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Addison	132	93	77	1	1	....	46	......	....	....	....	....	....	....	yes
Adrian	1,645	1,032	972	3	28	1	35	all	40	....	5	28	....	yes	yes
Albion	909	580	550	1	15	....	42	2-3	....	....	....	....	....	yes	yes
Allen	80	75	75	1	1	....	37	......	....	....	....	....	....	....	....
Alma	597	375	340	1	5	....	62	1-60	4	....	....	12	yes	yes	yes
Almont	255	188	168	1	3	....	47	1-10	....	....	....	....	....	....	yes
Alpena	1,754	949	897	2	21	....	43	5-6	18	....	....	4	....	....	....
Ann Arbor	2,022	1,589	1,525	6	35	3	40	3-4	203	53	62	97	yes	yes	yes
Armada	205	128	121	1	3	....	33	1-12	3	....	....	....	....	yes	yes
Augusta	215	115	104	2	3	....	....	......	....	....	....	....	....	....	....
Bad Axe	251	185	137	1	2	....	62	1-20	....	....	....	....	....	....	....
Baldwin	140	98	78	....	2	....	49	......	....	....	....	....	....	....	....
Bancroft	203	170	139	1	2	....	57	......	....	....	....	....	....	....	....
Battle Creek	2,092	1,311	1,201	3	31	1	36	all	35	....	....	20	yes	....	yes
Bay City	4,586	2,492	2,344	1	59	1	42	all	22	....	35	69	yes	....	....
Beacon No. 1	444	332	291	1	5	....	55	1 10	....	....	....	....	yes	yes	yes
Bear Lake	127	89	85	1	2	....	30	......	....	....	....	....	....	....	....
Belleville	170	129	119	1	2	....	46	......	....	....	....	....	....	....	....
Bellevue	220	175	175	1	4	....	44	......	....	....	....	....	....	yes	yes
Benton Harbor	699	626	579	1	12	....	48	1-6	16	....	....	23	....	yes	yes
Berrien Springs	200	200	146	1	4	....	40	1-5	....	....	....	....	....	yes	yes
Big Rapids	1,843	781	702	1	19	....	43	2-3	14	....	....	13	....	....	....
Birmingham	304	253	238	1	5	....	42	1-7	7	....	....	5	....	yes	yes
Blissfield	211	145	128	1	3	....	48	......	9	....	....	....	....	....	yes
Blissfield No. 2	183	113	102	1	2	....	38	1-10	....	....	....	....	....	....	....
Breckenridge	124	95	60	....	2	....	48	......	....	....	....	....	....	....	yes
Bridgeport	95	81	53	1	1	....	40	......	....	....	....	....	....	....	....
Brighton	312	195	174	1	4	....	39	......	2	....	....	....	yes	....	....
Bronson	244	205	188	1	3	1	51	1-30	....	....	....	....	....	yes	yes
Burlington	103	63	63	1	2	....	....	1-20	....	....	....	....	....	....	....
Byron	105	92	92	1	2	....	30	1-10	....	....	....	....	....	....	....
Caledonia	191	170	100	1	2	....	56	......	....	....	....	....	....	....	yes

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers.	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision	No. of Pupils Studying—				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Calumet	1,713	1,312	1,101	.6	16	1	45	3-5	....	....	12	23	yes	....	....
Cannonsburg	90	65	59	....	2	....	....	......	....	....	....	....	....	....	....
Capac	167	120	112	1	2	....	43	......	....	....	....	....	....	....	....
Caro	516	374	332	1	7	....	47	1-5	6	....	....	....	....	....	....
Casnovia	125	125	85	1	1	1	46	1-20	4	....	....	1	....	yes	yes
Carson City	236	165	125	1	3	....	41	......	....	....	....	....	....	....	yes
Cass City	232	198	124	1	2	....	66	......	....	....	....	....	....	....	yes
Cedar Springs	380	229	193	1	4	....	46	1-8	8	....	....	4	yes	....	yes
Central Mine	209	163	131	1	2	....	54	......	....	....	....	....	....	....	....
Charlotte	1,029	683	637	1	17	....	41	8-9	22	....	....	....	....	....	....
Chase	348	231	158	1	3	....	58	1-5	....	....	....	....	yes	yes	yes
Chelsea	391	294	282	1	6	1	42	......	....	....	....	....	....	....	....
Chesaning	360	228	202	1	4	....	46	......	....	....	....	....	....	....	....
Clare	266	215	184	2	2	....	54	1-10	....	....	....	....	....	....	....
Clarkston	160	120	......	1	2	....	....	......	....	....	....	....	....	....	....
Clinton	206	203	186	1	4	....	41	1-12	....	....	....	....	....	yes	yes
Coldwater	1,062	798	754	2	19	....	38	2-3	45	9	....	18	....	....	yes
Colon	179	128	112	1	2	....	43	......	....	....	....	....	....	....	....
Columbiaville	153	120	95	1	1	....	60	......	....	....	....	....	....	....	....
Concord	180	132	129	1	3	....	33	......	....	....	....	....	....	....	yes
Constantine	452	321	247	2	6	....	40	2-7	20	....	....	25	....	....	yes
Coopersville	334	192	173	1	3	....	48	......	....	....	....	....	....	....	yes
Corunna	396	278	......	1	7	....	34	......	13	....	....	10	....	....	yes
Croswell	179	146	134	1	2	....	49*	......	....	....	....	....	....	....	....
Crystal Falls	196	115	104	1	2	....	38	......	....	....	....	....	....	....	....
Detroit	27,329	14,349	13,450	15	294	3	47	all	215	17	78	157	....	yes	....
Dexter	311	267	213	1	6	....	38	1-15	6	....	....	3	....	....	....
Douglas	201	134	108	1	2	....	45	......	....	....	....	....	....	....	....
Dowagiac	557	369	340	3	8	....	33	1-4	....	....	....	....	....	....	....
Dryden	194	114	111	1	2	....	38	1-8	....	....	....	....	....	....	yes
Dundee	421	332	332	1	7	....	42	1-6	...	....	....	....	....	....	....
Eastlake	295	206	118	....	3	....	68	1-12	....	....	....	....	....	....	yes
East Saginaw	4,335	3,264	3,110	7	67	2	44	all	73	13	....	984	....	yes	yes
East Tawas	431	431	......	1	5	....	....	1-5	....	....	....	....	....	....	yes
Eaton Rapids	486	363	332	1	8	....	40	1-3	2	....	....	9	....	....	yes

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision.	No. of Pupils Studying— Latin.	Greek.	French.	German.	Is Special Instruction given in— Vocal Music?	Drawing?	Penmanship?
Ecorse.*	173	159	159	1	1	....	80	......	....	....	....	....	....	....	yes
Elk Rapids	392	347	333	1	7	....	43	1-3	....	....	....	....	....	....	....
Elsie	226	144	107	1	2	....	48	......	....	....	....	....	....	....	....
Essexville	347	174	137	1	3	....	43	......	....	....	....	....	....	....	yes
Evart	359	245	218	1	4	....	49	1-12	....	....	....	....	....	....	....
Fairfield	90	90	75	1	1	....	45	......	....	....	....	....	....	....	....
Farmers	82	75	68	1	....	....	....	......	....	....	....	....	....	....	yes
Farwell	168	83	69	1	2	....	28	......	....	....	....	....	....	....	....
Fenton	505	446	424	2	9	....	40	5-12	19	....	2	5	yes	....	yes
Ferrysburg	201	181	168	1	2	....	60	1-4	....	....	....	....	....	....	yes
Fillmore	129	115	86	1	1	....	58	......	....	....	....	....	yes	....	yes
Flint	2,368	1,501	1,422	2	35	1	41	2-3	63	10	31	26	....	....	yes
Flushing	225	143	153	3	2	....	29	1-7	....	....	....	....	....	....	....
Forester	110	94	90	1	1	....	47	......	....	....	....	....	....	....	....
Fowlerville	347	304	290	1	5	....	48	1-6	....	....	....	....	....	yes	yes
Frankfort	332	237	189	1	5	....	39	1-10	....	....	....	....	....	....	....
Franklin, No. 1	182	159	112	1	3	....	40	1-5	....	....	....	....	....	....	....
Franklin, No. 2	231	187	174	1	2	....	62	1-6	....	....	....	....	....	....	....
Franklin, No. 5	310	180	150	1	3	....	45	4-5	....	....	....	....	....	yes	yes
Freeland	99	63	46	1	1	....	32	......	....	....	....	....	....	....	....
Fruitport	91	75	80	1	1	....	37	......	....	....	....	....	yes	....	yes
Girard	90	90	53	1	2	....	30	......	....	....	....	....	....	....	yes
Grand Haven	1,876	1,021	965	3	21	1	43	5-6	15	....	....	....	yes	....	....
Grand Ledge	364	283	....	1	5	....	47	......	....	....	....	....	....	....	....
Grand Rapids city	10,481	6,042	5,667	7	157	3	35	all	151	22	17	53	yes	yes	yes
Grand Rapids, No. 1	314	230	161	1	3	....	57	1-10	....	....	....	....	....	....	yes
Grand Rapids, No. 15	120	100	90	1	1	....	....	......	....	....	....	....	....	....	....
Grandville	364	283	204	1	4	....	71	......	....	....	....	....	....	....	....
Greenland, No. 1	90	81	53	1	1	....	41	......	....	....	....	....	....	....	....
Greenland, No. 2	74	70	42	2	....	....	35	......	....	....	....	....	....	....	....
Greenland, No. 3, fl	59	40	37	1	1	....	20	......	....	....	....	....	yes	....	yes
Grindstone City	186	170	155	1	1	....	85	......	....	....	....	....	....	....	yes
Grosse Isle	168	155	110	1	2	....	52	......	....	....	....	....	....	....	....
Hancock	725	529	492	1	10	1	48	1-3	5	....	....	20	yes	....	....
Hanover	186	130	119	1	3	....	32	......	....	....	....	....	....	....	....

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No of Men Teachers.	No. of Women Teachers	No. of Special Teachers.	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision.	No. of Pupils Studying— Latin.	Greek.	French.	German.	Is Special Instruction given in— Vocal Music?	Drawing?	Penmanship?
Harrison	203	134	114	1	2		45								yes
Hart	247	201	177	1	3		50	1-10							yes
Hastings	1,029	578	520	1	13	1	41	3-8				9	yes		
Holland City	1,020	676	635	1	13	1	52	1-2					yes		yes
Holland, No. 9	93	54	43		1								yes	yes	yes
Horton	124	98	74	1	1		49								
Houghton	812	623	571	2	12	1	46		4				yes		
Howard City	210	175	154	1	2		58	1-12							
Hubbardston	146	93	93	1	2		31								
Humboldt	184	125	93	1	1		92								
Inverness	131	96	60	1	1		48								
Imlay City	406	234	209	1	4		47	1-10							
Iron Mountain	565	565	379	1	9		57	1-2						yes	yes
Ishpeming City	1,436	987	878	1	16	1	48	1-4	8				yes		
Ishpeming, No. 1	118	93	62		2		47								
Ithaca	471	352	317	2	4		59	1-6	4			4			
Jackson, No. 1	2,429	1,543	1,418	4	34	1	43	all	50			45		yes	
Jackson No. 17	1,881	937	897	1	20		47	1-2				6			
Jonesville	300	197	186	2	4		33	1-4	6				yes	yes	yes
Kalamazoo	3,351	1,930	1,801	2	53	1	36	all	48	10	14	13	yes		yes
Kalkaska	211	181	136	1	3		45						yes	yes	yes
Keelersville	79	79	79	1	1		39								
Laingsburg	167	110		2	2										
Lake Linden	740	573	512	3	10	1	44	1-5	7				yes		
Lakeside	448	216	195		5	2							yes		
Lakeview	245	220	191	1	3		55							yes	yes
Lamont	80	52	52	1	1		26								
L'Anse	255	169	140	1	4		34	1-10							
Lansing	2,590	1,311	1,215	3	30		40	all	21			15			
Lawton	183	166	155	1	3		42	1-12							yes
Leland	74	74	56	1	1		37								yes
Lisbon	96	96	77	1	1										
Litchfield	202	202	202	1	3		50								yes
Lowell	639	368	284	2	7		41	1-6							yes
ndington	1,503	940	875	2	19		45	3-4	34			7	yes	yes	yes

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No of Men Teachers.	No. of Women Teachers.	No. of Special Teachers	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision.	No. of Pupils Studying—				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Lyons	165	130	120	1	3		32								yes
McBrides	212	202	112	1	3		50								
Manchester	383	383	255	1	7		47	1-6	15			16		yes	yes
Manistique	198	198	165	2	2		55								yes
Manton	115	90	90		2										
Marcellus	148	129	120	1	2		43								
Marlette	273	148	148	1	2										
Marquette	1,463	991	914	1	20		49	4-11					yes		
Marysville	115	102	66		2		51								
Mason	560	376	341	1	9		40	1-3	13			11			
Mecosta	180	133	100	1	2		44						yes		yes
Memphis	246	155	144	1	2		52								
Mendon	249	207	188	1	4		41	1-12				1			
Menominee	984	669	624	1	15		42		6						
Metamora	153	93	93	1	2		31								yes
Michigamme	233	233	180	1	3		45						yes	yes	yes
Middleville	168	131	111	1	3		33								yes
Midland	146	78	63		2		39								
Monroe	589	424	387	1	10		38	3-7	38	4		3			
Morenci	276	239	239	1	5		40								
Morley	164	145	79	1	1		72								
Moscow	101	60	51	1	1		30								yes
Mount Clemens	834	488	448	1	10		44		1						yes
Mount Morris	124	109	71	1	1		54								
Muir	214	154	143	1	2		52		4			7		yes	yes
Muskegon	4,468	2,525	2,387	4	56		43	all					yes	yes	yes
Napoleon	175	125	110	1	2		43	1-10					yes		
National Mine	217	179	102	1	2		60								
Newaygo	238	199	174		4		50								
New Buffalo	164	115	100	1	2		33								yes
New Groningen	89	85	49	1	1		43								yes
New Haven	230	169	147	1	2		56	1-2					yes	yes	yes
New Holland	120	120	105	1	1		60								yes
New Troy	103	81	70	1	1		40								
Niles	906	674	618	2	20		32	5-6	9			2			
North Branch	253	185	126	1	2		62								

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers.	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision.	No. of Pupils Studying— Latin.	Greek.	French.	German.	Is Special Instruction given in— Vocal Music?	Drawing?	Penmanship?
Northville	246	213	213	1	4	....	42	1-6	8	1	....	4	yes	yes	yes
Norway	472	306	260	1	5	....	50	1-20	....	....	....	....	....	....	yes
Nunica	165	92	66	1	1	....	33	......	....	....	....	....	....	....	yes
Okemos	99	83	71	1	1	....	36	......	....	....	....	....	....	....	....
Orion	150	100	90	1	1	....	45	......	....	....	....	....	....	....	....
Ortonville	142	98	85	1	1	....	49	......	....	....	....	....	....	yes	yes
Oscoda	450	416	260	1	7	....	52	......	....	....	....	....	....	....	....
Osseo	119	79	58	1	1	....	30	......	....	....	....	....	....	....	....
Otsego	402	327	....	1	6	....	47	1-6	....	....	....	....	....	....	....
Otter Lake	112	95	95	1	1	....	48	......	....	....	....	....	....	....	yes
Owosso	1,118	724	655	5	12	....	43	1-3	30	....	....	20	....	....	....
Oxford	267	170	141	1	4	....	34	1-10	....	....	....	....	....	....	....
Parma	221	195	183	1	3	....	45	......	6	....	....	....	....	....	yes
Petoskey	590	376	356	1	8	....	42	1-5	....	....	....	....	....	....	yes
Phœnix	119	75	63	1	1	....	38	......	....	....	....	....	....	....	yes
Pierson	159	103	68	1	1	....	52	......	....	....	....	....	....	....	....
Plainwell	444	322	301	1	7	....	40	1-5	4	....	....	....	yes	....	....
Plymouth	378	310	238	1	6	....	48	1-8	2	....	....	18	....	....	yes
Pontiac	1,078	788	763	3	19	....	36	2-3	38	....	9	13	....	....	....
Port Austin	203	125	97	1	2	....	33	......	....	....	....	25	....	....	....
Port Crescent	135	80	66	1	1	....	33	......	....	....	....	....	....	....	yes
Port Hope	145	125	93	1	1	....	62	......	....	....	....	....	....	....	....
Port Huron	2,082	1,556	1,481	2	30	....	46	3-4	11	....	4	....	....	....	....
Portland	461	350	324	2	7	....	39	1-6	....	....	....	5	yes	....	....
Port Sanilac	121	82	66	1	1	....	33	......	....	....	....	....	yes	....	yes
Reading	211	172	168	2	2	....	43	......	....	....	....	....	....	....	....
Republic	594	444	352	1	6	....	63	......	....	....	....	....	....	yes	yes
Richmond	248	185	165	1	3	....	46	......	....	....	....	....	....	....	yes
Riley Centre	86	70	70	....	2	....	35	......	....	....	....	....	....	....	....
Rochester	237	192	140	1	3	....	48	......	2	....	....	13	....	....	....
Rockford	289	175	167	1	3	....	44	1-30	....	....	....	6	....	....	....
Royal Oak	101	80	73	1	1	....	37	......	....	....	....	....	....	....	....
St. Clair	566	374	336	1	9	....	37	1-4	3	....	2	3	....	....	....
St. Johns	699	502	466	1	12	1	39	3-5	28	....	5	24	yes	....	....
St. Louis	540	479	447	1	10	....	43	2-5	....	....	....	....	....	....	....
Saline	277	199	185	1	5	....	33	1-8	6	....	....	23	....	....	....

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers	Average No. of Pupils to Each Teacher.	Portion of Superintendent's Time given to Supervision	No. of Pupils Studying— Latin.	Greek.	French.	German.	Is Special Instruction given in— Vocal Music?	Drawing?	Penmanship?
Salt River	119	109	97	1	1	----	55	1-12	----	----	----	----	----	----	yes
Sand Beach	288	193	168	1	3	----	48	1-10	----	----	----	----	----	----	----
Sand Lake	168	141	97	1	2	--	47	------	----	----	----	----	----	----	----
Saranac	211	190	170	2	2	----	43	------	----	----	----	----	----	----	----
Saugatuck	358	216	179	1	4	----	43	------	----	----	----	----	----	----	----
Sault Ste. Marie	508	378	307	1	4	----	76	1-10	----	----	----	----	----	----	----
Schoolcraft	309	233	220	1	5	----	39	1-10	----	----	----	----	----	----	yes
Sheridan	210	160	135	1	3	----	40	1-12	----	----	----	----	----	----	----
South Haven	383	257	231	1	6	----	37	------	----	----	----	----	----	----	----
Sparta Centre	209	185	154	1	3	----	46	------	4	----	----	----	----	----	----
Springport	159	110	110	1	2	----	38	------	----	----	----	----	----	yes	yes
Springwells No. 1	614	388	388	1	6	----	55	1-10	----	----	----	----	----	----	yes
Stanton	514	361	306	1	8	----	40	1-4	13	----	----	----	----	----	----
Sturgis	522	384	369	1	10	----	38	1-2	6	----	----	----	yes	yes	yes
Tecumseh	508	394	360	2	10	----	31	1-3	15	----	----	10	----	yes	yes
Tekonsha	142	111	101	1	2	----	30	------	----	----	----	----	----	----	yes
Thornville	92	80	61	1	1	----	40	------	----	----	----	----	----	----	yes
Three Rivers No. 1	502	317	291	1	10	----	29	1-3	6	----	1	18	yes	----	----
Three Rivers No. 4	268	181	171	1	4	----	34	------	----	----	----	----	yes	----	yes
Trenton	308	206	173	1	2	----	68	------	----	----	----	----	----	----	yes
Union City	445	339	312	2	9	----	31	------	32	----	----	10	----	----	----
Utica	307	202	181	3	2	----	40	------	3	----	----	10	----	----	----
Vandalia	204	143	110	1	3	----	36	------	13	----	----	----	----	----	----
Vernon	195	160	135	1	2	----	53	------	2	----	----	----	----	----	----
Vicksburg	282	208	166	2	3	----	42	1-6	----	----	----	----	----	----	yes
Vriesland	125	94	74	1	1	----	37	------	----	----	----	----	yes	yes	yes
Wacousta	97	70	60	----	2	----	35	------	----	----	----	----	yes	----	yes
Waldron	99	87	83	1	1	----	42	------	----	----	----	----	----	yes	yes
Washington	78	65	56	1	1	----	32	------	----	----	----	----	----	----	----
Watervliet	116	87	67	1	1	----	44	------	----	----	----	----	----	----	yes
Wayland	362	237	197	1	4	----	47	------	4	----	----	12	----	----	yes
West Bay City No. 1	643	643	328	1	6	----	68	1-5	----	----	----	----	----	----	yes
West Bay City No. 3	210	175	140	1	2	----	59	------	----	----	----	----	----	yes	yes
White Cloud	120	98	71	1	1	----	49	------	----	----	----	----	----	----	yes
White Rock	74	74	52	1	1	----	26	------	----	----	----	----	----	----	----

TABLE XVIII.—*Continued.*

Districts.	Total Enrollment.	Average Number Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	No. of Special Teachers.	Average No. of Pupils to Each Teacher.	Portion of Superintendent's time given to Supervision.	Number of Pupils Studying—				Is Special Instruction given in—		
									Latin.	Greek.	French.	German.	Vocal Music?	Drawing?	Penmanship?
Woodland	124	93	57	1	1	....	46	......	....	....	....	....	....	....	....
Wyandotte	724	531	493	1	11	....	44	1-3	4	....	....	....	....	....	....
Zilwaukee	315	275	204	2	3	....	55	1-4	....	....	....	80	....	....	....
Zeeland	269	237	198	1	3	....	59	1-12	....	....	....	....	....	....	....

TABLE XIX.

Statistics of the High-School Department of Fifty-nine Graded School Districts Compiled from Reports of Superintendents and Principals for the School Year 1884–5.

Districts.	Enrollment in Department.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	Av. No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Av. Age of Class Graduated.		Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
								Years.	Months			
Adrian	153	120	114	1 1-2	3	27	17	18	....	$27 57	$4 62	$32 19
Albion	106	87	83	1-3	3	29	27	16	....	16 00	3 44	19 44
Alma	97	51	46	1	......	51	18	15	3	15 68	2 72	18 40
Almont	58	41	35	1	......	35	......	....	....	19 37	3 10	22 47
Alpena	54	41	39	2	1	22	......	20	6	34 34	3 69	38 03
Ann Arbor	466	374	363	4	5	37	243	18	2	28 48	4 57	33 05
Bad Axe	63	48	35	1	......	48	8	16	....	12 00	31	12 31
Benton Harbor	122	105	92	1	2	35	42	18	6	17 76	3 78	21 54
Berrien Springs	50	50	36	1	1	25	2	19	....	10 00	2 00	12 00
Brighton	72	46	41	1	......	46	......	....	....	17 39	4 98	22 37
Capac	62	45	40	1	......	45	5	16	....	13 33	2 09	15 42
Caro	83	48	43	1	1	24	24	19	....	25 54	5 61	31 15
Cedar Springs	97	54	48	1	1	27	17	20	....	21 50	2 26	23 76
Charlotte	156	96	91	......	3	32	74	19	....	17 04	2 98	20 02
Colon	44	36	31	1	......	36	11	13	8	16 67	85	17 52
Concord	33	29	28	1	......	29	9	17	....	27 58	2 44	30 02
Constantine	149	121	95	2	2	30	57	18	6	13 17	2 75	15 92
Detroit	784	583	564	7	16	25	......	18	6	33 32	5 34	38 66
Dowagiac	72	55	53	1	2	18	17	....	....	18 30	14 59	32 89
East Saginaw	238	189	186	1	6	27	7	18	5	27 51	4 43	31 94
Flint	270	198	193	2	5	33	66	19	....	22 45	3 35	25 80
Fowlerville	87	70	68	1	1	35	16	19	....	8 00	1 18	9 18

TABLE XIX.—*Continued.*

Districts.	Enrollment in Department.	Average No. Belonging.	Average Daily Attendance.	No. of Men Teachers.	No. of Women Teachers.	Av. No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Av. Age of Class Graduated.		Cost per Capita for Instruction.	Cost per Capita for Incidentals.	Total Cost per Capita.
								Years.	Months.			
Frankfort	43	31	23	1	......	31	......	17	....	$27 10	$1 89	$28 99
Grand Haven	69	55	52	8-100	2	28	4	16	10	24 16	3 19	27 35
Grand Rapids	491	363	346	3 5-6	9	29	52	18	10	31 10	13 57	44 67
Grand Rapids No. 1	20	16	15	1-3	......	57	7	....	....	7 00	2 00	9 00
Hancock	49	38	36	2-3	1	23	12	....	....	48 67	7 03	55 70
Hastings	300	118	110	1	2	39	151	18	7	12 38	2 59	14 97
Holland	50	47	46	1	1	36	4	17	....	12 34	1 77	14 11
Houghton	67	58	55	7-9	1	35	13	....	....	35 66	6 56	42 22
Jackson No. 1	247	193	185	2 1-3	2	48	37	....	....	25 20	3 23	28 43
Jackson No. 17	49	35	32	1-2	1	35	......	....	....	3 25	7 56	10 81
Kalamazoo	156	141	137	1 1-3	4	28	16	18	11	25 49	3 93	29 42
Lansing	118	88	84	....	2	29	......	....	....	25 56	4 98	30 54
Lowell	132	70	65	1	1	35	47	17	....	19 42	2 20	21 62
Marcellus	47	40	36	1	......	46	10	....	....	9 58	2 10	11 68
Mason	97	64	59	2-3	1 1-2	30	34	18	....	18 00	2 75	20 75
Menominee	32	17	16	1	1	17	1	....	....	70 58	5 44	76 02
Metamora	57	33	33	1	......	33	13	15	....	8 68	3 98	12 66
Mount Clemens	52	39	37	1	1-2	26	8	18	3	20 31	3 29	23 60
Muir	70	49	47	1	......	51	4	17	....	13 36	2 22	15 58
Muskegon	88	74	70	1	2	25	......	....	....	34 51	3 71	38 22
National Mine	51	32	23	1	......	32	......	....	....	9 77	4 48	14 25
Newaygo	37	31	28	....	1	31	8	13	....	7 00	1 00	8 00
Niles	75	63	60	1 1-3	3	16	15	18	....	35 43	7 12	42 55
Otsego	110	90	100	1	2	45	50	18	....	12 50	90	13 40
Plymouth	75	64	54	14-16	1	30	12	18	6	16 80	4 10	20 90
Pontiac	137	107	104	1 1-3	3	25	36	19	6	27 37	4 72	32 09
Port Huron	90	74	68	2	2	30	2	18	....	22 76	9 33	32 09
Richmond	75	62	57	1	......	50	12	....	....	6 30	2 57	8 87
Rochester	56	51	37	1	2-3	34	18	16	....	19 84	1 56	21 40
St. Johns	88	65	62	1	2	32	4	19	....	19 38	2 74	22 12
St. Louis	60	54	52	3-5	1	34	8	....	....	15 00	1 25	16 25
Sheridan	86	65	50	1	1	32	......	18	....	7 85	4 62	12 47
Saline	52	37	35	1	1	20	7	17	8	32 76	4 25	37 01
Stanton	63	41	37	1	1	20	8	18	....	32 31	3 32	35 63
Sturgis	101	81	75	1-2	2	41	30	18	....	12 00	3 15	15 15
Tecumseh	70	52	50	1	2	26	33	18	8	35 44	4 19	39 63
Wyandotte	54	49	47	5-6	1	31	3	18	8	21 39	1 40	22 79

TABLE XX.

Statistics of the Grammar Department of Fifty-nine Graded School Districts, Compiled from Reports of Superintendents and Principals for the School Year 1884–5.

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	Number of Men Teachers.	Number of Women Teachers.	Average No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promot'd		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita.
								Years.	Months.			
Adrian	515	357	340	5-12	11	32	12	14	....	$15 62	$4 62	$20 24
Albion	283	178	165	1-3	4	44½	3	14	....	11 00	3 44	14 44
Alma	180	108	99	....	2	54	5	14	6	6 09	2 72	8 41
Almont	68	47	43	....	1 1-2	31	......	....	....	9 56	3 10	12 66
Alpena	287	194	184	....	5	39	......	14	3	17 29	3 69	20 98
Ann Arbor	617	503	482	1	13	46	33	15	....	11 78	4 57	16 35
Bad Axe	82	60	42	....	1	60	1	12	....	5 00	40	5 40
Benton Harbor	336	309	291	....	5	61	18	14	....	16 78	3 78	20 56
Berrien Springs	35	35	30	....	1	35	......	....	....	10 00	2 00	12 00
Brighton	103	65	59	....	2	32	......	14	....	8 77	4 98	13 75
Capac	38	33	28	....	1	33	......	....	....	7 60	2 09	9 69
Caro	131	95	88	....	2	47	2	14	....	7 91	5 61	13 52
Cedar Springs	82	62	54	....	1	62	......	15	....	5 81	2 26	8 07
Charlotte	336	232	216	1	4 14-15	47	45	15	....	10 46	2 98	13 44
Colon	45	33	29	....	1	33	2	11	....	9 85	85	10 70
Concord	38	29	28	....	1	29	3	14	6	9 93	2 44	12 37
Constantine	144	100	65	....	2	50	2	13	6	9 27	2 75	12 02
Detroit	7,051	3,905	3,687	5	104	36	......	14	2	16 83	5 34	22 17
Dowagiac	144	103	97	2	1	34	5	....	....	12 94	14 59	27 53
East Saginaw	1,274	985	936	6	16	45	6	15	7	12 51	4 43	16 94
Flint	900	521	496	....	13	40	32	14	2	....	....	......
Fowlerville	90	81	77	....	1	81	1	13	....	8 00	1 18	9 18
Frankfort	104	74	67	....	2	37	......	13	3	9 86	1 89	11 75
Grand Haven	353	196	187	1 42-100	4	39	3	14	8	12 14	3 19	15 33
Grand Rapids	2,935	1,777	1,689	2 1-3	43	39	85	13	10	14 12	13 57	27 69
G'd Rapids No. 1	52	44	40	2-3	1-3	57	......	13	....	7 00	2 00	9 00
Hancock	192	164	156	1-6	3	......	9	....	....	13 03	7 03	20 06
Hastings	210	167	149	....	4	41	17	14	....	8 64	2 59	11 23
Holland	250	180	169	....	4	44	8	13	5	8 08	1 77	9 85
Houghton	74	58	54	1-9	2	29	3	....	....	24 69	6 56	31 25
Jackson No. 1	682	513	480	1 1-3	12	39	36	....	....	13 80	3 23	17 03
Jackson No. 17	496	266	284	1-4	7	38	......	....	....	2 87	7 56	10 43

TABLE XX—*Continued.*

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	Number of Men Teachers.	Number of Women Teachers.	Average No. of Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promot'd		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita.
								Years.	Months.			
Kalamazoo	874	524	498	1-3	17	31	15	15	6	$15 52	$3 93	$19 45
Lansing	987	459	426	1	10	41	......	....	....	9 69	4 98	14 67
Lowell	202	107	101	1	2	36	5	13	6	10 49	2 20	12 69
Marcellus	49	44	40	....	1	49	2	....	....	6 13	2 10	8 23
Mason	129	100	90	1-6	2	50	6	14	....	8 80	2 75	11 55
Menominee	156	101	96	....	3	33	1	....	....	13 86	5 44	19 30
Metamora	42	31	31	....	1	31	1	....	....	6 00	3 98	9 98
Mount Clemens	192	118	112	....	3	39	8	14	8	9 55	3 29	12 84
Muir	65	47	43	....	1	51	......	13	....	6 13	2 22	8 35
Muskegon	656	483	462	....	12	40	......	....	....	15 47	3 71	19 18
National Mine	54	52	29	....	1	52	......	....	....	9 77	4 48	14 25
Newaygo	49	40	38	....	1	40	......	10	....	6 00	1 00	7 00
Niles	226	181	166	1-3	4	45	3	15	....	9 51	7 12	16 63
Otsego	122	102	112	....	2	51	......	....	....	6 00	90	6 90
Plymouth	159	133	103	1-16	3	34	9	13	9	5 94	4 10	10 04
Pontiac	258	218	211	1 1-3	5 1-2	32	20	14	10	14 32	4 72	19 04
Port Huron	268	246	228	....	5	43	10	14	....	9 30	9 33	18 63
Richmond	83	71	65	....	2	42	2	14	9	6 30	2 57	8 87
Rochester	71	55	44	....	1	55	6	13	....	5 82	1 56	7 38
St. Johns	199	154	143	....	3 1-2	44	23	14	4	10 83	2 74	13 57
St. Louis	130	110	100	1-5	3	34	6	....	....	8 50	1 25	9 75
Sheridan	60	50	45	....	1	50	......	12	....	7 85	4 62	12 47
Saline	86	65	60	....	2	32	8	13	7	10 96	4 25	15 21
Stanton	102	81	73	....	2	40	6	13	....	10 61	3 32	13 98
Sturgis	181	125	118	1-4	4	32	22	14	....	6 91	3 15	10 06
Tecumseh	184	166	159	1	3	41	9	14	6	8 55	4 19	12 74
Wyandotte	233	180	170	1	3	45	......	....	....	8 99	1 40	10 39

TABLE XXI.

Statistics of the Primary Department in Fifty-nine Graded School Districts, Compiled from Reports of Superintendents and Principals for the School Year 1884-5.

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	Number of Men Teachers.	Number of Women Teachers.	Average No. Pupils to each Teacher.	No of Non-Resident Pupils.	Average Age of Class Promot'd		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita.
								Years.	Months.			
Adrian	977	555	518	1-12	14	40	5	10	....	$9 53	$4 62	$14 15
Albion	518	315	301	1-3	8	31	4	9	6	9 00	3 44	12 44
Alma	320	216	195	....	3	72	3	9	3	4 12	2 72	6 84
Almont	129	100	90	....	1 1-2	66	......	....	....	5 02	3 10	8 12
Alpena	1,413	714	674	2	15	48	......	10	8	9 54	3 69	13 23
Ann Arbor	989	712	680	1	17	42	48	10	....	9 02	4 57	13 59
Bad Axe	106	77	60	....	1	77	......	8	....	4 00	50	4 50
Benton Harbor	241	212	196	....	5	42	6	9	6	5 52	3 78	9 30
Berrien Springs	115	115	80	....	2	58	......	....	....	10 00	2 00	12 00
Brighton	137	84	74	....	2	42	......	10	....	5 95	4 98	10 93
Capac	67	51	44	....	1	51	......	....	....	5 00	2 09	7 09
Caro	302	231	201	....	4	58	8	10	....	5 73	5 61	11 34
Cedar Springs	201	113	91	....	2	57	......	10	....	6 37	2 26	8 63
Charlotte	537	355	330	....	8 1-3	43	15	10	6	9 37	2 98	12 35
Colon	90	59	52	....	1	59	1	9	....	5 42	85	6 27
Concord	109	74	73	....	2	37	1	12	....	7 78	2 44	10 22
Constantine	159	100	87	....	2	50	......	9	4	9 27	2 75	12 02
Detroit	19,494	9,861	9,199	2	181	56⅓	......	10	6	10 29	5 34	15 63
Dowagiac	341	211	190	....	5	42	1	....	....	9 98	14 59	24 57
East Saginaw	2,823	2,090	1,988	....	45	47	......	11	1	9 50	4 43	13 93
Flint	1,198	782	733	....	17	46	4	9	10	9 64	3 35	12 99
Fowlerville	170	153	145	....	3	71	......	10	....	8 00	1 18	9 18
Frankfort	185	132	99	....	3	44	......	9	....	7 80	1 89	9 69
Grand Haven	1,454	770	726	1 1-2	15	51	3	10	11	8 38	3 19	11 57
Grand Rapids	7,055	3,902	3,632	1 1-3	105	37	43	10	6	11 23	13 57	24 80
Gr. Rapids No.1	242	170	106	....	2 2-3	57	......	9	....	7 00	2 00	9 00
Hancock	484	327	300	1-6	6	54	......	....	....	7 75	7 03	14 78
Hastings	519	292	259	....	7	41	3	10	8	7 90	2 59	10 49
Holland	720	449	420	....	8	58	5	10	....	6 30	1 77	8 07
Houghton	671	507	462	1 1-9	9	51	4	....	....	10 51	6 56	17 07
Jackson No. 1	1,500	837	753	1-3	19	44	21	....	....	10 70	3 23	13 93
Jackson No. 17	1,336	699	643	1-4	12	58	......	....	....	5 48	7 56	13 04

TABLE XXI.—*Continued.*

Districts.	Enrollment in Department.	Average Number Belonging.	Average Daily Attendance.	Number of Men Teachers.	Number of Women Teachers.	Average No. Pupils to each Teacher.	No. of Non-Resident Pupils.	Average Age of Class Promot'd		Cost Per Capita for Instruction.	Cost Per Capita for Incidentals.	Total Cost Per Capita.
								Years.	Months.			
Kalamazoo......	2,321	1,265	1,166	1-3	32	40	4	11	3	$9 07	$3 93	$13 00
Lansing.........	1,485	764	705	....	18	42	......	....	....	8 10	4 98	13 08
Lowell..........	305	191	118	....	4	48	1	9	....	6 25	2 20	8 45
Marcellus.......	52	45	44	....	1	45	......	....	....	5 77	2 10	7 87
Mason	334	212	192	1-6	5 1-2	39	......	10	....	6 90	2 75	9 65
Menominee.....	796	551	512	....	11	50	2	10	2	8 59	5 44	14 03
Metamora......	54	32	32	....	1	32	2	....	....	4 00	3 98	7 98
Mt. Clemens....	590	330	299	....	6 1-2	51	2	11	6	6 75	3 29	10 04
Muir............	79	58	52	....	1	51	......	10	....	4 96	2 22	7 18
Muskegon	3,552	1,899	1,794	....	41	46	......	....	....	11 32	3 71	15 03
National Mine..	111	95	50	....	1	95	......	....	....	9 77	4 48	14 25
Newaygo........	152	128	108	....	2	64	......	8	....	6 00	1 00	7 00
Niles...........	605	430	392	1-3	13	33	......	10	....	13 17	7 12	20 29
Otsego	170	135	153	....	3	45	......	....	....	6 00	90	6 90
Plymouth	144	118	81	1-16	2	56	9	3	....	6 70	4 10	10 80
Pontiac.........	683	462	447	1-3	10 1-2	43	2	11	6	8 61	4 72	13 33
Port Huron.....	1,724	1,236	1,185	....	23	77	3	11	....	4 06	9 33	13 39
Richmond......	90	52	43	....	1	52	1	10	....	6 30	2 57	8 87
Rochester	110	86	59	....	1 1-3	64	......	10	....	4 84	1 56	6 40
St. Johns........	412	283	261	....	6 1-2	44	31	11	....	9 89	2 74	12 63
St. Louis........	350	315	295	1-5	6	51	3	....	....	7 00	1 25	8 25
Sheridan........	64	45	40	....	1	45	......	8	....	7 85	4 62	12 47
Saline...........	139	97	90	....	2	48	2	9	10	6 27	4 25	10 52
Stanton.........	349	239	196	....	5	48	......	10	....	7 59	3 32	10 91
Sturgis..........	240	178	176	1-4	4	44	13	10	....	6 50	3 15	9 65
Tecumseh	254	176	170	....	5	35	1	10	8	8 40	4 19	12 59
Wyandotte.....	437	302	276	1-6	7	43	1	....	....	7 56	1 40	8 96

TABLE XXII.

Receipts and Expenditures at Teachers' Institutes for the Calendar Year 1885.

Counties.	Locations.	Dates.	Receipts.		Disbursements.			
			County Fund.	State Fund.	Compensation of Instructors.	Expenses of Instructors.	Other Expenses.	Total.
Totals			$9,415 39	$1,790 20	$7,970 28	$2,135 27	$1,100 04	$11,205 59
Alcona	Harrisville	Mar. 30-Apr. 3	$42 00	$60 00	$65 00	$28 60	$8 40	$102 00
Allegan	Saugatuck	Mar. 30-Apr. 3	138 75		90 00	30 90	17 85	138 75
Allegan	Plainwell	Apr. 6-10	139 40		90 00	25 40	24 00	139 40
Antrim	Bellaire	Aug. 17-21	61 00	49 75	80 00	25 75	5 00	110 75
Arenac	Omer	June 8-12	28 00	60 00	69 00	10 75	8 25	88 00
Baraga	Hancock	Aug. 31-Sept. 4	13 50	60 00	71 25	75	1 50	73 50
Barry	Hastings	Aug. 24-28	196 25		130 00	44 00	22 25	196 25
Bay	West Bay City	Mar. 31-Apr. 3	70 50	42 40	80 00	13 90	19 00	112 90
Benzie	Benzonia	Aug. 10-15	42 50	60 00	69 86	25 84	6 80	102 50
Berrien	St. Joseph	Aug. 10-21	289 90		225 00	49 80	15 10	289 90
Branch	Coldwater	July 27-Aug. 7	275 88		225 00	25 60	25 28	275 88
Calhoun	Battle Creek	Mar. 30-Apr. 3	160 00		90 00	39 05	30 95	160 00
Cass	Cassopolis	Aug. 17-27	210 50		177 00	21 45	12 05	210 50
Charlevoix	Boyne City	Aug. 24-28	65 50	60 00	72 00	44 75	8 75	125 50
Cheboygan	Cheboygan	Aug. 10-14	42 50	60 00	60 40	37 80	4 30	102 50
Chippewa	Sault Ste. Marie	Nov. 1-5	56 00	54 89	64 79	27 05	19 05	110 89
Clare	Clare	Dec. 21-24	28 00	60 00	57 65	25 35	5 00	88 00
Clinton	Ovid	Aug. 24-28	136 75		100 00	16 90	19 85	136 75
Crawford	Grayling	Mar. 23-27	73 00		74 08	21 90	14 52	110 50
Roscommon			37 50					

Delta	Escanaba	Aug. 17-21	18 00	60 00	90 00	34 70	5 80	130 50
Menominee			52 50					
Eaton	Charlotte	Aug. 24-28	135 90		90 00	25 90	20 00	135 90
Emmet	Harbor Springs	Aug. 31-Sept. 4	55 50	57 95	90 00	11 25	12 20	113 45
Genesee	Mt. Morris	Aug. 31-Sept. 4	165 00		90 00	57 00	18 00	165 00
Gr. Traverse	Traverse City	Aug. 31-Sept. 4	89 00	40 00	92 25	25 25	11 50	129 00
Gratiot	Ithaca	Aug. 24-28	135 10		90 00	26 36	18 74	135 10
Hillsdale	Hillsdale	Aug. 17-24	214 30		145 00	24 70	44 60	214 30
Houghton	Hancock	Aug. 17-24	105 50	60 00	109 00	42 00	14 50	165 50
Huron	Bad Axe	Aug. 24-28	141 50		80 00	49 80	11 70	141 50
Ingham	Mason	July 29-Aug. 7	244 50		184 15	40 85	19 50	244 50
Ionia	Ionia	Aug. 24-28	178 15		130 00	29 80	18 35	178 15
Isabella	Mt. Pleasant	Aug. 31-Sept. 4	119 00	40 00	105 00	38 10	15 90	159 00
Jackson	Grass Lake	July 27-Aug. 7	263 50		219 00	33 60	10 90	263 50
Kalamazoo	Vicksburg	Aug. 24-28	203 40		135 00	57 35	11 05	203 40
Kalkaska	Kalkaska	Oct. 19-23	65 00	60 00	90 00	24 80	10 20	125 00
Kent	Grand Rapids	Mar. 30-Apr. 3	191 25		115 00	35 40	40 85	191 25
Kent	Grand Rapids	July 13-24	413 86		295 00	79 85	39 01	413 86
Keweenaw	Hancock	Aug. 24-31	35 50	60 00	84 75	5 00	5 75	95 50
Lake	Baldwin	Oct. 12-16	42 50	60 00	60 85	36 30	5 35	102 50
Lapeer	Lapeer	Aug. 17-21	181 80		130 00	34 05	17 75	181 80
Leelanaw	Leland	Aug. 3-7	42 50	60 00	51 12	46 90	4 48	102 50
Lenawee	Adrian	Aug. 17-28	323 10		230 00	61 10	32 00	323 10
Livingston	Pinckney	Aug. 3-7	211 15		170 00	24 45	16 70	211 15
Mackinac	St. Ignace	Aug. 17-21	26 50	60 00	54 16	22 75	9 59	86 50
Macomb	Utica	July 27-31	112 00	13 90	90 00	16 50	19 40	125 90
Manistee	Manistee	Mar. 30-Apr. 3	75 50	43 72	90 00	15 12	14 10	119 22

TABLE XXII.—*Continued.*

Counties.	Locations.	Dates.	Receipts.		Disbursements.			
			County Fund.	State Fund.	Compensation of Instructors.	Expenses of Instructors.	Other Expenses.	Total.
Marquette	Negaunee	Aug. 24-28	$132 81		$101 00	$19 50	$12 31	$132 81
Mason	Ludington	Aug. 24-28	64 50	$60 00	85 50	28 00	11 00	124 50
Mecosta	Big Rapids	Aug. 31-Sept. 4	104 50	18 00	90 00	12 70	19 80	122 50
Midland	Midland	Aug. 24-28	60 50	60 00	69 95	43 05	7 50	120 50
Missaukee	Lake City	Oct. 12-16	33 55	60 00	67 50	20 35	5 70	93 55
Monroe	Monroe	Aug. 31-Sept. 4	183 58		130 00	24 95	28 63	183 58
Montcalm	Stanton	Aug. 24-28	170 74		120 00	38 46	12 28	170 74
Montmorency	Hillman	June 22-26	43 00	60 00	74 50	23 50	5 00	103 00
Muskegon	Lakeside	Aug. 10-14	109 50		80 82	22 58	6 10	109 50
Newaygo	Newaygo	Oct. 26-29	86 00	50 00	90 00	36 00	10 00	136 00
Oakland	Pontiac	Aug. 10-21	288 85		215 00	36 60	37 25	288 85
Oceana	Hart	Aug. 31-Sept. 4	92 00	40 00	97 05	24 95	10 00	132 00
Ogemaw	West Branch	June 15-20	30 00	55 00	75 00	4 10	5 90	85 00
Osceola	Hersey	Aug. 31-Sept. 4	105 00	40 00	104 40	27 75	12 85	145 00
Oscoda	Mio	Oct. 5-9	60 50	49 60	65 00	33 85	11 25	110 10
Otsego	Gaylord	Nov. 2-6	25 00	54 99	50 00	19 99	10 00	79 99
Ottawa	Grand Haven	Aug. 8-14	260 30		208 75	38 00	13 55	260 30
Saginaw	St. Charles	June 1-5	126 30		90 00	23 85	12 45	126 30
St. Clair	Capac	Aug. 17-22	128 40		90 00	22 50	15 90	128 40
St. Joseph	Burr Oak	Oct. 19-23	140 52		90 00	34 52	16 00	140 52
Sanilac	Port Sanilac	Mar. 30-Apr. 3	138 70		90 00	28 00	20 70	138 70
Shiawassee	Corunna	Oct. 26-30	126 47		90 00	24 57	11 90	126 47

Tuscola	Caro	Aug. 24-28	171 35		130 00	25 40	15 95	171 35
Van Buren	Paw Paw	Aug. 24-28	119 20		90 00	14 00	15 20	119 20
Washtenaw	Ypsilanti	Aug. 17-21	199 75		145 00	26 90	27 85	199 72
Wayne	Belleville	Aug. 10-21	418 93		345 00	48 93	20 00	413 93
Wexford	Sherman	Mar. 16-20	51 50	60 00	84 50	17 85	9 15	111 50

TABLE XXIII.

Local Committees, Conductors, and Instructors at Teachers' Institutes for the Calendar Year 1885.

Counties.	Local Committees.	Conductors.	Assistant Instructors.
Alcona	Hugh Brown	E. P. Church	S. B. Laird.
Allegan (1)	E. G. Trowbridge	D. Putnam	E. B. Fairfield, Jr.
Allegan (2)	L. E. Irland	Austin George	H. R. Pattengill.
Antrim	C. S. Guile	C. T. Grawn	F. O. Wickham.
Arenac	J. H. Belknap	H. R. Pattengill	F. L. Snodgrass.
Baraga	W. J. Cox	H. R. Pattengill	J. G. Johnston, W. J. Cox.
Barry	C. H. Cole	J. Estabrook	G. A. Osinga, LeRoy Halsey.
Bay	J. W. Hauxhurst	W. H. Payne	F. W. Lankenaw.
Benzie	T. B. Pettit	C. W. Pickell	G. J. Edgecombe.
Berrien	G. F. Comings	E. C. Thompson	J. W. Simmons, O. E. Aleshire.
Branch	H. J. Cook	Daniel Putnam	F. A. Barbour, H. J. Cook.
Calhoun	M. W. Cobb	I. N. Demmon	O. D. Thompson.
Cass	J. B. Boyd	H. A. Ford	J. L. Lucas, W. C. Hewitt.
Charlevoix	R. T. Corbett	John Goodison	W. E. Ransom.
Cheboygan	W. L. Barr	J. W. Ewing	F. O. Wickham.
Chippewa	A. J. Murray	H. C. Rankin	A. J. Murray.
Clare	D. E. Alward	R. W. Putnam	H. R. Pattengill.
Clinton	S. W. Baker	J. Montgomery	S. W. Baker, Mrs. J. M. Dilts.
Crawford Roscommon.	W. A. Masters	H. R. Pattengill	H. M. Enos.
Delta Menominee.	Adele Tyler	Chas. Kelsey	H. C. Rankin.
Eaton	M. Louise Jones	I. N. Demmon	D. Howell.
Emmet	M. C. Ladd	H. M. Enos	J. T. Ewing.
Genesee	M. H. Hughes	D. Howell	J. W. Caldwell.
Gr. Traverse	C. J. Kneeland	C. T. Grawn	W. H. Brooks.
Gratiot	K. Rolla Peet	H. King	G. P. Glenn.
Hillsdale	S. G. Burkhead	A. E. Haynes	W. A. Drake, J. R. Miller, A. Lodeman.
Houghton	W. J. Cox	H. R. Pattengill	J. G. Johnston, W. J. Cox.
Huron	Geo. A. Maywood	W. D. Clizbe	H. C. Rankin.
Ingham	H. F. Derr	D. Howell	M. Louise Jones, J. S. Crombie.
Ionia	J. W. Ewing	J. S. Crombie	C. L. Bemis, J. W. Ewing.
Isabella	M. Devereaux	Austin George	H. King.
Jackson	Eugene Miller	D. E. Haskins	W. S. Perry, A. Lodeman, Eugene Miller.
Kalamazoo	Ashley Clapp	A. E. Haynes	A. Lodeman, Mrs. A. M. Garrigues.

TABLE XXIII.—*Continued.*

Counties.	Local Committees.	Conductors.	Assistant Instructors.
Kalkaska	G. R. Cotton	H. A. Ford	Mrs. Kate B. Ford.
Kent (3)	N. H. Walbridge	L. McLouth	D. Howell, E. A. Strong, Geo. C. Shepard.
Kent (4)	G. A. Ranney	H. R. Pattengill	W. S. Perry, Mrs. A. M. Garrigues, E. A. Strong, J. W. Caldwell.
Keweenaw	W. J. Cox	H. R. Pattengill	J. G. Johnston, W. D. Cox.
Lake	A. N. Smith	I. N. Demmon	J. W. Caldwell.
Lapeer	W. D. Clizbe	O. D. Thompson	Geo. P. Glenn, Mrs. A. M. Garrigues.
Leelanaw	Minnie A. Voice	H. A. Ford	Mrs. Kate B. Ford.
Lenawee	A. E. Curtis	Austin George	J. W. Humphrey, E. G. Walker.
Livingston	W. A. Sprout	I. N. Demmon	E. P. Church, W. H. Payne, Geo. Barnes.
Mackinac	I. N. Collins	J. W. Ewing	G. J. Edgecumbe.
Macomb	W. D. Rice	W. S. Perry	C. B. Hall.
Manistee	Webster Cook	J. S. Crombie	H. R. Pattengill.
Marquette	F. D. Davis	Chas. Kelsey	John Northmore.
Mason	S. N. Hill	J. W. Caldwell	E. L. Briggs.
Mecosta	P. M. Brown	E. A. Strong	W. N. Ferris.
Midland	T. W. Crissey	S. G. Burkhead	W. A. Drake.
Missaukee	D. W. Day	H. A. Ford	Mrs. Kate B. Ford.
Monroe	J. A. Stewart	H. A. Ford	Mrs. Kate B. Ford, J. Montgomery.
Montcalm	F. A. Lyon	C. B. Thomas	I. W. Barnhart, C. O. Hoyt.
Montmorency	H. A. McNeil	H. R. Pattengill	E. L. Little.
Muskegon	Mrs. Nellie A. Whipple	E. P. Church	O. D. Thompson.
Newaygo	Tyson Smith	J. Estabrook	H. C. Rankin.
Oakland	F. S. Fitch	I. N. Demmon	T. S. Clark, F. S. Fitch.
Oceana	Seth Edson	C. W. Pickell	E. L. Briggs.
Ogemaw	A. E. Sharpe	H. R. Pattengill	F. L. Snodgrass.
Osceola	B. C. Scott	S. W. Baker	N. H. Walbridge.
Oscoda	John Randall	H. R. Pattengill	John Randall.
Otsego	Henry Whitely	H. R. Pattengill	
Ottawa	E. B. Fairfield, Jr.	E. B. Fairfield, Jr.	R. W. Putnam, J. G. Plowman.
Saginaw	A. Knechtel	H. R. Pattengill	H. A. Ford.
St. Clair	E. M. Fisher	N. H. Walbridge	E. M. Fisher.
St. Joseph	Daniel Gillette	W. H. Payne	H. R. Pattengill.
Sanilac	J. F. Seaman	Webster Cook	R. W. Putnam.
Shiawassee	A. D. McIntyre	W. H. Payne	J. W. Caldwell.
Tuscola	Wm. Honey	E. A. Wilson	N. H. Walbridge, W. H. Honey.
Van Buren	A. C. Martin	P. A. Latta	E. M. Russell.
Washtenaw	E. C. Warner	J. Estabrook	R. W. Putnam, A. Lodeman, E. M. Foote.
Wayne	J. A. Sinclair	W. H. Payne	W. H. Cheever, Laura L. Rose, J. W. Caldwell.
Wexford	G. S. Hicks	H. R. Pattengill	Henry M. Enos.

TABLE XXIV.

Enrollment at Teachers' Institutes for the Calendar Year 1885.

Counties.	Whole number of Teachers required to supply the Schools.	Number Enrolled.			Kinds and Grades of Certificates held by Members.						No. without experience in Teaching.	No. having rece'd Normal Instruction.	Average Attendance each half-day.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.	Special.			
Totals	9,426	1,933	5,157	7,090	18	122	289	466	4,161	266	2,067	1,879	64.9
Alcona	21	7	13	20	......	......	2	5	10	......	4	7	15
Allegan (1)	226	29	77	106	1	1	2	7	44	......	53	......	88.6
Allegan (2)	....	42	149	191	......	5	3	20	68	......	105	31	128.6
Antrim	80	19	33	52	......	......	9	3	24	3	13	23	33.5
Arenac	23	16	19	35	......	......	3	4	15	......	12	9	22
Baraga	14	7	39	46	......	4	3	3	25	......	20	12	37
Barry	159	33	88	121	......	2	6	13	84	......	20	71	80
Bay	135	17	82	99	......	......	12	7	40	1	39	28	62
Benzie	45	27	46	73	1	......	3	6	40	1	22	25	59
Berrien	219	38	125	163	......	4	15	12	100	2	34	75	78.1
Branch	173	36	119	155	1	2	6	38	79	......	49	20	81.7
Calhoun	242	44	163	207	1	2	5	11	104	7	75	34	104.3
Cass	140	31	70	101	1	4	1	5	66	2	30	35	57
Charlevoix	73	13	43	56	......	1	1	5	33	2	15	15	36.8
Cheboygan	57	10	38	48	......	......	4	2	34	1	15	10	34.6
Chippewa	42	10	33	43	......	2	2	2	20	6	11	6	38
Clare	36	9	27	36	......	......	3	......	22	2	10	7	25.5
Clinton	160	33	80	113	......	......	......	7	87	......	24	71	85.6
Crawford	37	16	33	49	......	......	4	1	25	3	16	8	41.3
Roscommon	12												
Delta	37	6	50	56	1	1	2	4	33	1	20	4	48.5
Menominee	66												
Eaton	188	28	94	122	......	......	2	5	92	......	24	43	83.6
Emmet	72	16	54	70	......	1	4	3	34	5	21	9	48.1
Genesee	223	33	67	100	......	1	4	6	56	2	23	27	78
Grand Traverse	72	36	74	100	......	6	3	5	61	......	25	52	73.3
Gratiot	144	53	109	162	......	......	2	9	111	2	44	55	124
Hillsdale	204	37	138	175	2	2	5	9	113	6	37	60	124
Houghton	87	12	50	71	......	3	2	......	33	......	20	12	48.9
Huron	113	23	57	80	......	1	1	11	46	......	19	32	50

(1) Institute at Saugatuck.
(2) Institute at Plainwell.

TABLE XXIV.—*Continued.*

Counties.	Whole number of Teachers requir-ed to supply the Schools.	Number Enrolled.			Kinds and Grades of Certificates held by Members.						No. without experience in Teaching.	No. having rec'd Normal Instruction.	Average Attendance each half-day.
		Men.	Wo-men.	Total.	State.	Nor-mal.	First.	Sec-ond.	Third.	Spec-ial.			
Ingham	192	45	115	160	......	4	2	8	78	3	49	20	96
Ionia	186	54	123	177	......	1	2	6	124	2	36	55	105
Isabella	104	22	55	77	......	2	3	5	42	44	23	18	64.4
Jackson	239	28	122	150	......	1	3	3	91	3	49	107	110
Kalamazoo	213	53	97	150	3	1	2	8	99	92	40	38	95.6
Kalkaska	50	18	34	52	......	......	3	6	28	4	6	9	45.5
Kent (3)	421	53	175	228	......	3	11	16	142	10	47	53	136.7
Kent (4)	......	14	86	100	......	1	1	3	57	2	35	22	40
Keweenaw	16	11	47	58	......	7	4	2	27	......	19	13	46.6
Lake	51	9	38	47	......	1	4	1	37	......	5	14	36.1
Lapeer	169	36	79	115	......	......	2	3	93	3	21	30	74.4
Leelanaw	53	6	16	22	......	......	......	1	14	......	8	......	15
Lenawee	278	34	87	121	......	1	4	3	87	......	36	38	54.4
Livingston	155	43	64	107	......	2	1	3	62	8	36	33	72
Mackinac	35	4	16	20	......	......	21	1	8	1	7	3	11.2
Macomb	143	29	67	96	1	2	3	5	63	......	27	9	75.3
Manistee	89	22	66	88	......	5	3	2	34	......	44	16	47
Marquette	109	23	71	94	2	3	5	6	42	5	28	17	70
Mason	74	17	46	63	......	1	2	11	36	1	14	15	46
Mecosta	115	26	66	92	......	......	6	10	48	5	21	51	73.3
Midland	64	10	48	58	......	......	4	1	30	6	19	5	51
Missaukee	35	14	26	40	......	......	2	2	21	1	14	8	34
Monroe	159	35	91	126	......	......	4	16	80	1	33	42	87.2
Montcalm	178	23	66	89	......	1	2	5	45	2	55	22	62
Montmorency	18	7	23	30	......	......	1	5	18	......	5	3	25
Muskegon	177	9	56	65	......	......	7	8	33	2	10	7	45.5
Newaygo	109	19	65	84	......	2	2	2	44	10	24	23	59.1
Oakland	276	47	147	194	......	1	6	9	137	2	46	8	119
Oceana	98	37	54	91	......	1	6	10	44	1	12	24	66
Ogemaw	37	10	24	34	......	......	1		23	1	9	5	28
Osceola	95	25	56	81	......	1	1	6	55	......	18	1	57.8
Oscoda	26	10	11	21	......	......		4	12	......	5	3	15.5
Otsego	38	18	30	48	......	......		5	21	1	20	5	38
Ottawa	180	28	97	125	......	......	4	16	79	......	34	16	61.7
Saginaw	281	26	82	108	1	......	2	4	72	1	31	18	79

(3) Institute held in the Spring, at Grand Rapids, one week.
(4) Institute held in July, at Grand Rapids, two weeks.

TABLE XXIV.—*Continued.*

Counties.	Whole number of Teachers required to supply the Schools.	Number Enrolled.			Kinds and Grades of Certificates held by Members.						No. without experience in Teaching.	No. having rece'd Normal Instruction.	Average Attendance each half-day.
		Men.	Women.	Total.	State.	Normal.	First.	Second.	Third.	Special.			
St. Clair	201	13	58	71	......	1	1	6	42	1	20	40	53.8
St. Joseph	173	35	115	150	......	3	6	10	89	......	42	21	86
Sanilac	143	53	53	106	2	......	6	21	42	...	38	33	79.6
Shiawassee	156	40	90	130	......	......	12	4	86	1	27	26	79
Tuscola	154	62	102	164	......	......	8	13	111	5	32	62	131
Van Buren	197	43	121	164	1	......	6	7	118	...	32	42	93.1
Washtenaw	255	59	130	189	......	24	4	3	121	1	50	71	127
Wayne	508	43	119	162	......	9	10	6	91	...	86	41	80
Wexford	76	39	44	83	......	2	1	2	36		42	12	71

TABLE XXV.

General Statistics of State and Incorporated Institutions, Compiled from the Reports of Officers, for the Academic Year 1884-5.

Name of Institution.	Location.	Date of Organization.	Religious Denomination.	Name of Principal, President or Superintendent.	No. of Instructors.	No. of Students (or Inmates) during Year.	No. of Graduates last Commencement.	Whole No. of Graduates since Founded.	No. of Volumes in Library.	No. of Volumes added to Library during Year.
State:										
University of Michigan	Ann Arbor	1841	Non-sectarian	James B. Angell	83	1,295	363	7,775	56,091	7,246
State Agricultural College	Lansing	1855	Non-sectarian	Edwin Willits	14	175	29	360	8,686	1,018
State Normal School	Ypsilanti	1852	Non-sectarian	D. Putnam	20	745	97	1,285	6,779	304
Institution for Deaf and Dumb	Flint	1854	Non-sectarian	M. T. Gass	22	266	9	....	2,347	134
School for the Blind	Lansing	1880	Non-sectarian	J. F. McElroy	7	74	......	....	1,000	....
*State Reform School	Lansing	1856	Non-sectarian	C. A. Gower	......	....	......	....	....	....
Industrial Home for Girls	Adrian	1881	Non-sectarian	Margaret Scott	18	164	......	440	....	....
School for Dependent Children	Coldwater	1874	Non-sectarian	John N. Foster	6	528	220	1,367	1,368	....
Incorporated:										
Adrian College	Adrian	1859	Methodist Protestant	D. S. Stephens	10	186	13	....	3,500	....
Albion College	Albion	1861	Methodist Episcopal	L. R. Fiske	14	325	14	175	4,643	698
Battle Creek College	Battle Creek	1874	Seventh Day Adventist	W. W. Prescott	17	411	10	43	1,100	50
Detroit College	Detroit	1881	Roman Catholic	Jas. G. Walshe	10	228	......	14	4,850	350
Detroit Home and Day School	Detroit	1883	Non-sectarian	J. D. Liggett	12	252	12	31	1,000	....
German American Seminary	Detroit	1861	Non-sectarian	Stephen Mars	6	150	......	....	275	15
Hillsdale College	Hillsdale	1835	Free-Will Baptist	Ransom Dunn	13	650	25	600	8,000	70

---

*No report received from this institution.

TABLE XXV.—*Continued.*

Name of Institution.	Location.	Date of Organization.	Religious Denomination.	Name of Principal, President or Superintendent.	No. of Instructors.	No. of Students (or Inmates) during Year.	No. of Graduates last Commencement.	Whole No. of Graduates since Founded.	No. of Volumes in Library.	No. of Volumes added to Library during Year.
Hope College	Holland	1866	Reformed Church in America	Charles Scott	8	151	6	114	6,363	128
Kalamazoo College	Kalamazoo	1855	Baptist	Kendall Brooks	5	161	9	171	3,419	69
Olivet College	Olivet	1859	Congregational and Presbyterian	Horatio Q. Butterfield	15	343	15	195	12,000	630
*Michigan Female Seminary	Kalamazoo	1856	Presbyterian	....	....	....	....	....	....	....
Michigan Military Academy	Orchard Lake	1877	Non-sectarian	J. Sumner Rogers	7	113	15	72	....	150
Raisin Valley Seminary	Near Adrian	1863	Friends	W. W. White	3	115	8	70	500	50
Somerville School	St. Clair	1880	Non-sectarian	C. C. Wetsell	9	45	3	....	....	200
Spring Arbor Seminary	Spring Arbor	1872	Free Methodist	A. H. Stilwell	5	120	4	28	350	15

* No report received from this institution.

TABLE XXVI.

Financial Statistics of State and Incorporated Educational Institutions, Compiled from the Reports of Officers for the Academic Year 1884–5.

Institutions.	Annual Cost of Tuition per Student	Aver'ge Cost of Board per Week.	Total Av. Annual Cost p'r Student (to the Stud'nt)	Total Av. Annual Cost p'r Student (to the State.)	Estimated Value of Grounds, Buildings, Apparatus, etc.	Amount of Productive Funds	Income from Productive Funds	Amount of Legislative Appropriation for Year 1884.	Receipts from Tuition Fees during Year.	Receipts from all Other Sources.	Current Expenses for the Year.	Expenses for Permanent Improvements.	Liabilities.
State:													
University of Michigan	$48 00	[a]$4 00	$208 00	$67 00	$850,000 00	$544,151 66	$38,521 02	$56,000 00	$69,789 07	$46,578 65	$192,888 74	$18,000 00	....
State Agricultural College	....	2 50	116 25	....	367,000 00	283,664 00	23,978 68	18,911 00	....	7,065 90	35,892 87	26,595 18	....
State Normal School	10 00	2 50	175 00	47 28	148,000 00	70,000 00	4,200 00	32,500 00	2,203 75	453 00	35,226 35	700 00	....
Institution for Deaf and Dumb	....	....	....	176 74	465,822 58	....	....	45,000 00	200 00	....	53,406 09	34,011 57	....
School for the Blind	....	....	....	....	....	....	....	36,920 00	....	44,231 31	25,067 10	23,846 80	....
* State Reform School	....	....	....	....	....	....	....	....	....	....	....	....	....
Industrial Home for Girls	....	....	....	181 85	145,209 03	1,000 00	50 00	34,688 44	....	500 00	25,437 34	2,700 37	....
School for Dependent Children	....	....	....	109 34	163,074 00	1,000 00	70 00	39,000 00	....	....	32,011 55	7,347 94	....
Incorporated:													
Adrian College	6 00	2 00	....	....	128,000 00	80,000 00	5,000 00	....	5,000 00	2,250 00	12,250 00	....	$23,000 00
Albion College	15 00	2 50	....	....	100,000 00	170,000 00	11,479 97	....	6,205 52	430 11	18,694 13	....	11,281 79
Battle Creek College	25 00	2 50	....	....	57,000 00	....	....	....	4,000 00	2,700 00	6,467 45	552 00	19,289 00
Detroit College	40 00	....	....	....	65,000 00	....	....	....	6,128 00	....	4,210 00	366 00	13,448 00
Detroit Home and Day School	70 00	7 50	....	....	42,000 00	....	....	....	16,000 00	....	14,000 00	500 00	....
German-American Seminary	15 00	....	....	....	7,500 00	....	....	....	1,846 58	163 27	3,207 43	394 73	5,000 00
Hillsdale College	[b]......	2 00	....	....	150,000 00	138,142 00	9,030 16	....	28 50	3,838 41	12,683 85	2,100 00	....

---

[a] Including room.

* No report received from this Institution.

[b] Scholarship.

TABLE XXVI.—*Continued.*

Institutions.	Annual Cost of Tuition per Student	Aver'ge Cost of Board per Week	Total Av. Annual Cost p'r Student (to the stud'nt)	Total Av. Annual Cost p'r Student (to the state.)	Estimated Value of Grounds, Buildings, Apparatus, etc.	Amount of Productive Funds.	Income from Productive Funds	Amount of Legislative Appropriation for Year 1884.	Receipts from Tuition Fees during Year.	Receipts from all Other Sources.	Current Expenses for the Year.	Expenses for Permanent Improvements.	Liabilities.
Hope College	$15 00	$2 75	....	....	$41,000 00	$101,939 51	$4,512 91	....	$1,884 75	$3,773 77	$10,080 00	$1,100 00	$1,000 00
Kalamazoo College	18 00	2 75	....	....	130,000 00	64,000 00	4,120 00	....	1,802 00	3,300 00	9,515 00	....	•18,740 00
Olivet College	30 00	2 25	....	....	133,000 00	106,336 00	7,720 44	....	4,956 85	10,840 68	22,959 91	13,451 61	13,057 57
* Michigan Female Seminary	....	....	....	....	....	....	....	....	....	....	....	....	....
Michigan Military Academy	350 00	....	....	....	100,000 00	....	....	....	....	....	....	....	....
Raisin Valley Seminary	20 00	2 00	....	....	15,000 00	22,000 00	7,500 00	....	2,500 00	....	3,200 00	800 00	400 00
Somerville School	40 00	7 00	....	....	150,000 00	....	....	....	1,600 00	8,000 00	9,000 00	800 00	....
Spring Arbor Seminary	19 00	2 60	....	....	12,000 00	....	....	....	1,300 00	....	1,300 00	....	....

• Provided for.

* No report received from this Institution.

TABLE XXVII.

Members of County Boards of School Examiners for the Year 1885–6.

Counties.	Names.	Postoffices.	Occupations.	Terms Expire
Alcona	C. P. Reynolds, Chairman	Harrisville	Agent	1887
	J. E. Fair, Secretary	Harrisville	County Treasurer.	1886
	D. McGregor	Harrisville	Merchant	1888
Alger	F. C. Hogle, Chairman	Grand Marais	Merchant	1887
	Mrs. Chas. Johnston, Secretary	Rock River	Housekeeper	1886
	E. C. Cox	Munising	Probate Judge	1888
Allegan	J. F. Taylor, Chairman	Douglas	Clergyman	1886
	P. A. Latta, Secretary	Allegan	Attorney	1887
	J. W. Humphrey	Wayland	Teacher	1888
Alpena	F. S. Dewey, Chairman	Alpena	Merchant	1886
	E. L. Little, Secretary	Alpena	Clergyman	1888
	A. R. McDonald	Alpena	Attorney	1887
Antrim	C. S. Guile, Chairman	Bellaire	Attorney	1887
	Mrs. C. B. Zeran, Secretary	Eastport	Teacher	1886
	W. R. Grant	Mancelona	Teacher	1888
Arenac	J. H. Belknap, Chairman	Omer	Merchant	1887
	A. L. Wilkins, Secretary	Maple Ridge	Farmer	1886
	J. J. Decker	Omer	Editor	1888
Baraga	Thomas McGillan, Chairman	Baraga	Farmer	1886
	E. L. Mason, Secretary	L'Anse	Banker	1887
	D. J. Norton	L'Anse	Druggist	1888
Barry	Enoch Andrus, Chairman	Irving	Farmer	1886
	J. J. England, Secretary	Woodland	Farmer	1887
	Willis P. Polhemus	Hastings	Physician	1888
Bay	M. R. Hartwell, Chairman	West Bay City	Teacher	1887
	John H. Sharpe, Secretary	Essexville	Teacher	1886
	S. R. Hoobler	Saganin	Farmer	1888
Benzie	Mrs. Rose Woodward, Ch'm'n.	Frankfort	Housekeeper	1887
	Thomas B. Pettitt, Secretary	Benzonia	Teacher	1886
	Denison F. Holden	Oviatt, Leelanaw Co	Surveyor	1888
Berrien	C. B. Groat, Chairman	Niles	Teacher	1887
	H. C. Crosby, Secretary	New Buffalo	Teacher	1886
	J. C. Lawrence	Benton Harbor	Teacher	1888
Branch	J. D. A. Fisk, Chairman	Coldwater	Farmer	1887
	H. E. King, Secretary	Coldwater	Teacher	1886
	William H. Lockerby	Quincy	Lawyer	1888
Calhoun	S. G. Gorsline, Chairman	Battle Creek	Farmer	1886
	R. A. Culver, Secretary	Tekonsha	Teacher	1887
	Mrs. A. R. Camburn	Albion	Housekeeper	1888
Cass	R. W. Hain, Chairman	Dailey	Teacher	1887
	M. Pemberton, Secretary	Vandalia	Teacher	1886
	Charles A. Mosher	Cassopolis	Teacher	1888
Charlevoix	William Harris, Chairman	Norwood	Farmer	1887
	R. L. Corbett, Secretary	Boyne City	Attorney	1886
	John Redpath	Boyne Falls	Clergyman	1888
Cheboygan	Frank Shepard, Chairman	Cheboygan	Attorney	1886
	A. W. Westgate, Secretary	Cheboygan	Merchant	1887
	D. J. Galbraith	Cheboygan	Teacher	1888
Chippewa	Thomas Ryan, Chairman	Sault Ste. Marie.	Farmer	1886
	G. L. Trempe, Secretary	Sault Ste. Marie.	Merchant	1888
	E. S. B. Sutton	Sault Ste. Marie.	Attorney	1887
Clare	Thomas W. Averill, Chairman.	Harrison	County Treasurer.	1887
	A. J. Doherty, Secretary	Clare	Agent	1886
	George J. Cummins	Harrison	Attorney	1888

TABLE XXVII.—*Continued.*

Counties.	Names.	Postoffices.	Occupations.	Terms Expire
Clinton	Chas. E. Hollister, Chairman	Laingsburg	Surveyor	1886
	Will H. Brunson, Secretary	St. Johns	Attorney	1887
	L. F. Conrad	Wacousta	Farmer	1888
Crawford	W. A. Masters, Chairman	Grayling	Merchant	1886
	Fred. M. Richmond, Secretary	Roscommon	Farmer	1887
	Chas. E. Hicks	Frederickville	Teacher	1888
Delta	John Power, Chairman	Escanaba	Attorney	1887
	John F. Oliver, Secretary	Escanaba	Real Estate	1886
	F. D. Phillips	Fayette	Physician	1888
Eaton	Chas. McKinney, Chairman	Vermontville	Teacher	1886
	Orr Schurtz, Secretary	Eaton Rapids	Editor	1887
	J. L. Wagner	Grand Ledge	Teacher	1888
Emmet	A. L. Deuel, Chairman	Harbor Springs	Attorney	1886
	J. T. Ewing, Secretary	Petoskey	Teacher	1887
	James L. Morrice	Harbor Springs	County Treasurer	1888
Genesee	A. E. Ransom, Chairman	Flushing	Editor	1886
	G. F. Brown, Secretary	Duffield	Teacher	1888
	E. D. Black	Flint	Teacher	1887
Gladwin	F. L. Prindle, Chairman	Gladwin	Attorney	1886
	C. C. Fouch, Secretary	Gladwin	Attorney	1888
	Francis Burkit	Meredith	Farmer	1887
Grand Traverse	D. S. Nickerson, Chairman	Kingsley	Farmer	1886
	C. J. Kneeland, Secretary	Traverse City	Physician	1888
	E. B. Dennis	Fife Lake	Teacher	1887
Gratiot	O. M. Everden, Chairman	Sumner	Teacher	1887
	W. C. Calland, Secretary	St. Louis	Clergyman	1886
	G. T. Brown	Ithaca	Attorney	1888
Hillsdale	C. R. Coryell, Chairman	Jonesville	Farmer	1886
	W. A. Drake, Secretary	Hillsdale	Teacher	1887
	S. T. Morris	Litchfield	Teacher	1888
Houghton	W. B. Northup, Chairman	Hancock	Clerk	1886
	H. M. Slauson, Secretary	Houghton	Teacher	1887
	C. J. White	Lake Linden	Teacher	1888
Huron	G. A. Maywood, Chairman	Bad Axe	Attorney	1886
	F. H. Stafford, Secretary	Port Hope	Merchant	1888
	M. Meddaugh	Sebewaing	Teacher	1887
Ingham	J. Jay Calkins, Chairman	Leslie	Attorney	1887
	J. S. Huston, Secretary	Williamston	Teacher	1886
	A. R. Hardy	Okemos	Teacher	1888
Ionia	J. B. Millard, Chairman	Belding	Teacher	1886
	A. V. Phister, Secretary	Hubbardston	Editor	1887
	C. L. Bemis	Portland	Teacher	1888
Iosco	D. E. Guiley, Chairman	East Tawas	Surveyor	1886
	S. B. Laird, Secretary	East Tawas	Teacher	1888
	S. L. Philbrick	Oscoda	Teacher	1887
Iron	S. D. Hollister, Chairman	Iron River	County Clerk	1887
	W. T. Carpenter, Secretary	Stambaugh	Physician	1886
	L. A. Fredericks	Metropolitan	Physician	1888
Isabella	L. C. Griffith, Chairman	Millbrook	County Clerk	1887
	P. F. Dodds, Secretary	Mt. Pleasant	Attorney	1886
	S. J. Jameson	Loomis	Teacher	1888
Jackson	E. N. Palmer, Chairman	Brooklyn	Physician	1886
	D. E. Haskins, Secretary	Concord	Teacher	1887
	F. M. Harlow	Springport	Teacher	1888
Kalamazoo	J. W. Parkhurst, Chairman	Augusta	Farmer	1887
	Ashley Clapp, Secretary	Vicksburg	Teacher	1886
	Alex, Hadlock	Kalamazoo	Teacher	1888

TABLE XXVII.—*Continued.*

Counties.	Names.	Postoffices.	Occupations.	Terms Expire
Kalkaska	A. A. Abbott, Chairman	Kalkaska	Real Estate	1886
	C. C. Jencks, Secretary	Kalkaska	Attorney	1888
	Warren Douglas	Lodi	Teacher	1887
Kent	G. G. Bennett, Chairman	Grand Rapids	Nurseryman	1886
	James Chalmers, Secretary	Sparta	Teacher	1888
	G. A. Ranney	Cannonsburg	Farmer	1887
Keweenaw	Wm. A. Williams, Chairman	Copper Falls	Teacher	1887
	J. C. Dunstan, Secretary	Central Mine	Teacher	1886
	C. A. Hanscom	Eagle River	Teacher	1888
Lake	E. G. Johnson, Chairman	Luther	Contractor	1887
	D. A. Cornell, Secretary	Reed City	Farmer	1886
	F. J. West	Baldwin	Teacher	1888
Lapeer	Andrew Kester, Chairman	Five Lakes	Farmer	1886
	C. E. Palmerlee, Secretary	Dryden	Teacher	1887
	W. D. Clizbe	Lapeer	Teacher	1888
Leelanaw	S. J. Hutchinson, Chairman	Northport	Physician	1887
	W. H. Crowell, Secretary	Maple City	Farmer	1886
	Henry McManus	Traverse City	Teacher	1888
Lenawee	H. C. Wilson, Chairman	Blissfield	Teacher	1886
	E. G. Walker, Secretary	Lenawee Junct'n	Teacher	1887
	Ira Waterman	Hudson	Teacher	1888
Livingston	Thomas Gordon, Chairman	Howell	Book-keeper	1887
	M. M. Abbott, Secretary	Plainfield	Farmer	1886
	H. E. Reed	Howell	Farmer	1888
Mackinac	J. R. Bailey, Chairman	Mackinac	Physician	1886
	G. A. Cady, Secretary	St. Ignace	Attorney	1888
	James McNamara	St. Ignace	Attorney	1887
Macomb	A. M. Keeler, Chairman	Richmond	Teacher	1886
	O. D. Thompson, Secretary	Romeo	Teacher	1887
	M. W. Smith	Mt. Clemens	Dentist	1888
Manistee	D. S. Harley, Chairman	Manistee	Attorney	1886
	D. Bemiss, Secretary	Manistee	Agent	1887
	G. H. Kilborn	Bear Lake	Farmer	1888
Manitou	John Donlevey, Chairman	St. James	Shoemaker	1886
	M. F. O'Donnell, Secretary	St. James	Clerk	1887
	W. J. Gallagher	St. James	Fisherman	1888
Marquette	H. Olcott, Chairman	Ishpeming	Teacher	1886
	Chas. Kelsey, Secretary	Marquette	Teacher	1887
	John Northmore	Republic	Teacher	1888
Mason	B. S. Mills, Chairman	Fountain	Farmer	1887
	G. H. Blodgett, Secretary	Ludington	Attorney	1886
	L. W. Rose	Ludington	Farmer	1888
Mecosta	P. M. Brown, Chairman	Big Rapids	Farmer	1887
	C. E. Tuck, Secretary	Mecosta	Teacher	1886
	W. N. Ferris	Big Rapids	Teacher	1888
Menominee	S. J. Kimball, Chairman	Norway	Physician	1887
	J. W. Bird, Secretary	Menominee	Merchant	1888
Midland	W. W. Allen, Chairman	Midland	Farmer	1886
	T. W. Crissey, Secretary	Midland	Editor	1887
	W. V. Sanford	Lee's Corners	Teacher	1888
Missaukee	J. T. Stitt, Chairman	Stittsville	Merchant	1886
	D. McBain, Jr., Secretary	Galt	Farmer	1888
	R. P. Lamb	Manton	Teacher	1887
Monroe	J. R. Rogers, Chairman	Willits	Teacher	1887
	T. E. Allen, Secretary	Carlton	Teacher	1886
	J. W. Billmeir	Monroe	Attorney	1888

TABLE XXVII.—*Continued.*

Counties.	Names.	Postoffices.	Occupations.	Terms Expire
Montcalm	E. P. Church, Chairman	Greenville	Teacher	1887
	S. F. Kenneday, Secretary	Lakeview	Attorney	1886
	F. A. Lyon	Stanton	Attorney	1888
Montmorency	Tillison Babcock, Chairman	Godfrey	Teacher	1886
	August Bargehr, Secretary	Big Rock	Farmer	1887
	M. M. McCormick	Idlewild	Farmer	1888
Muskegon	Frank Bracelin, Chairman	Montague	Journalist	1887
	N. L. Downie, Secretary	North Muskegon	Teacher	1886
	J. H. Cogshall	Fruitport	Teacher	1888
Newaygo	Edwin Ware, Chairman	Fremont	Teacher	1887
	Tyson Smith, Secretary	Newaygo	Physician	1886
	W. S. Millard	Hesperia	Teacher	1888
Oakland	Fred. Wieland, Chairman	Clarkston	Teacher	1886
	E. R. Webster, Secretary	Pontiac	Attorney	1887
	C. W. Soulby	Milford	Farmer	1888
Oceana	F. W. VanWickle, Chairman	Shelby	Druggist	1887
	G. C. Myers, Secretary	New Era	Farmer	1886
	C. N. Young	Hesperia	Editor	1888
Ogemaw	F. L. Snodgrass, Chairman	West Branch	Attorney	1886
	A. E. Sharpe, Secretary	West Branch	Teacher	1887
	A. L. Cumming	Churchill	Farmer	1888
Ontonagon	G. E. Arnold, Chairman	Greenland	Teacher	1886
	J. S. Monroe, Secretary	Ontonagon	Teacher	1887
	N. W. Haire	Rockland	Teacher	1888
Osceola	R. C. Hepburn, Chairman	Evart	Physician	1886
	A. B. Perrin, Secretary	Reed City	Teacher	1888
	B. E. Scott	Hersey	Teacher	1887
Oscoda	S. H. Hagaman, Chairman	Mio	Farmer	1887
	G. W. Randall, Secretary	Harmon	Farmer	1886
	O. W. Crawford	Harmon	Teacher	1888
Otsego	Henry Whiteley, Chairman	Gaylord	Agent	1886
	J. M. Sanborn, Secretary	Gaylord	Surveyor	1888
	F. A. Baldwin	Gaylord	Attorney	1887
Ottawa	Albert Lahuis, Chairman	Zeeland	Merchant	1887
	Mrs. A. V. Weatherwax, Sec'y.	Jenisonville	Housekeeper	1886
	A. W. Taylor	Nunica	Teacher	1888
Presque Isle	T. E. Shaw, Chairman	Shaw	Teacher	1887
	E. Erskine, Jr., Secretary	Rogers City	Teacher	1888
	P. A. Inglesby	Rogers City	Attorney	1886
Roscommon	Frank Converse, Chairman	Roscommon	County Clerk	1886
	G. L. Alexander, Secretary	Roscommon	Attorney	1888
	J. B. Johnston	St. Helens	Book-keeper	1887
Saginaw	A. L. Bingham, Chairman	East Saginaw	Teacher	1887
	W. B. Cubbage, Secretary	Freeland	Physician	1886
	T. E. W. Adams	Chesaning	Farmer	1888
St. Clair	E. M. Fisher, Chairman	Capac	Teacher	1887
	Harvey Tappan, Secretary	Port Huron	Teacher	1886
	C. J. McCormick	Smith's Creek	Teacher	1888
St. Joseph	W. H. Davis, Chairman	Colon	Teacher	1887
	E. A. Holsington, Secretary	Three Rivers	Teacher	1886
	S. Osbon	Sturgis	Teacher	1888
Sanilac	C. L. Messer, Chairman	Marlette	Banker	1886
	Lewis Baker, Secretary	Lexington	Farmer	1888
	W. D. McQuisten	Port Sanilac	Teacher	1887
Schoolcraft	W. C. Pechin, Chairman	Manistique	Attorney	1887
	O. B. Weed, Secretary	Manistique	Teacher	1886
	W. F. Riggs	Manistique	Attorney	1888

TABLE XXVII.—*Continued.*

Counties.	Names.	Postoffices.	Occupations.	Terms Expire
Shiawassee	D. C. Cooper, Chairman	Owosso	Farmer	1887
	E. M. Plunkett, Secretary	Vernon	Teacher	1886
	G. R. Brandt	Byron	Teacher	1888
Tuscola	E. J. Darbee, Chairman	Caro	Teacher	1886
	W. H. Honey, Secretary	Caro	Teacher	1887
	J. A. Chapell	Tuscola	Teacher	1888
Van Buren	A. E. Jennings, Chairman	Decatur	Teacher	1886
	E. F. Bradt, Secretary	Hartford	Teacher	1887
	C. C. Phillips	Bangor	Editor	1888
Washtenaw	G. S. Wheeler, Chairman	Salem	Merchant	1886
	M. J. Lehman, Secretary	Chelsea	Attorney	1887
	E. C. Warner	Ypsilanti	Farmer	1888
Wayne	J. P. Reed, Chairman	Rockwood	Physician	1886
	Cholett Cady, Secretary	Wayne	Farmer	1887
	John Gillespie	Denton	Teacher	1888
Wexford	G. S. Hicks, Chairman	Manton	Clergyman	1886
	H. C. Foxworthy, Secretary	Haire	Teacher	1887
	A. J. Teed	Cadillac	Civil Engineer	1888

DOCUMENTS

ACCOMPANYING THE

REPORT

OF THE

SUPERINTENDENT OF PUBLIC INSTRUCTION.

UNIVERSITY OF MICHIGAN.

PRESIDENT'S ANNUAL REPORT.

To the Honorable Board of Regents:

I beg leave to submit my report for the year ending September 30, 1885.

The following changes have occurred in the Faculties:

Owing to the illness of Professor Wilson of the Homœopathic Medical College at the opening of the University year, the duties of his chair were performed for three weeks by Dr. Long, of Ionia. It being found impracticable for him to favor us with his services longer, Dr. John F. Brown, of Jackson, was appointed in his stead Lecturer for the year.

In June, 1885, Instructors B. L. D'Ooge, A. M., H. H. Kingsley, A. B., and John Dewey, Ph. D., were reappointed for one year; Henry Wade Rogers, A. M., Tappan Professor of Law, was appointed also Professor of Roman Law in the School of Political Science; Mortimer E. Cooley, Assistant Engineer, U. S. N., who had been detailed by the Navy Department to give instruction here for a limited period, received the permanent appointment of Professor of Mechanical Engineering; Arthur W. Burnett, A. B., was appointed Instructor in English and in German for one year; James N. Martin, Ph. M., M. D., was chosen Lecturer on Oral Pathology and Surgery in the Dental College; the title of Clarence G. Taylor, B. S., was changed from Assistant in Mechanical Engineering, to Superintendent of the Mechanical Laboratory, and that of Assistant Professor Charles S. Denison, M. S., C. E., from Assistant Professor of Mechanical and Free Hand Drawing, to Professor of Descriptive Geometry, Stereotomy, and Drawing; and the following appointments were made to complete the Faculty of the Homœopathic Medical College: Hugo R. Arndt, M. D., Professor of Materia Medica, James C. Wood, M. D., Professor of Obstetrics and Diseases of Women and Children, and David F. McGuire, M. D., Associate Professor of Ophthalmology and Otology.

The resignation of Hon. James V. Campbell, Marshall Professor of Law, was for the second time presented and reluctantly accepted.

In August, the resignation of C. K. Wead, Acting Professor of Physics, and that of Charles K. Adams, Professor of History and Dean of the School of Political Science, were tendered and accepted; and Hon. Thomas M. Cooley was elected Professor of History and Dean of the School of Political Science.

Mr. Wead has given nine years of faithful service to the University. It may be hoped that the exigencies of business affairs, which call him away for a time from his scientific work, will not prevent him from resuming at an early day the studies and investigations in physics, for which his attainments and abilities so eminently fit him.

Dr. Adams resigned his chair to accept the honorable appointment of President of the Cornell University. He has spent all the years of his manhood under the roof of this Institution. Having graduated here in 1861, he has since then been constantly in the service of the University. Since 1867 he has filled the chair of History. It is not too much to say that he has brought his department of work to the very front rank, while by his writings he has gained a wide reputation as a scholar. By his large study of educational problems and his broad views of University work, he has contributed his full part to the development of this University and has thus fitted himself for the large responsibilities which are now laid upon him. He carries with him the best wishes of his former associates for his success in his new field, and for the prosperity of the great institution over which he is called to preside.

It is with the sincerest regret that the University sees Judge Campbell terminate all official connection with us. Only one other man living was at so early a date in her service, and no one has ever served her more faithfully. In 1841, the year in which the University was opened for the reception of students, he was made Secretary of the Board of Regents, and he discharged the duties of that office until 1845. In 1859, on the organization of the Law Department, he was appointed to the chair, which he has now resigned after twenty-six years of labor. To his affluent learning, his wide reputation as a jurist and a scholar, and his great attractiveness as a teacher and a man, the Law School owes no small degree of its success. His interest in all departments of the University was so generous, and his companionship was so cherished by the members of all our Faculties, that his withdrawal will be felt throughout the University.

It is the cause of deep gratification to the whole University, that Judge Cooley, whose resignation was so regretted last year, has consented to rejoin us for a time at least, and give instruction in the Literary Department, in Constitutional History and Political Science, and in the Law School in Constitutional Law.

In September the Executive Committee appointed Howard Ayers, Ph. D., Instructor in Zoölogy for one year, and Jerome C. Knowlton, A. B., Assistant Professor in the Law School for one year, and invited Professor Harrington to give the instruction in Physics during the first semester.

The degrees conferred were as follows:

DEGREES ON EXAMINATION.

Bachelor of Letters	11
Bachelor of Science (Mechanical Engineering)	1
Bachelor of Science (Civil Engineering)	6
Bachelor of Science	7
Bachelor of Philosophy	16
Bachelor of Arts	37
Master of Letters	1
Mechanical Engineer	1
Master of Science	1
Master of Arts	6
Doctor of Medicine (Department of Medicine and Surgery)	80

Bachelor of Laws	186
Pharmaceutical Chemist	26
Doctor of Medicine (Homœopathic College)	6
Doctor of Dental Surgery	28
	363
HONORARY DEGREES.	
Master of Pharmacy	1
Mechanical Engineer	1
Doctor of Philosophy	1
Doctor of Laws	1
Total	367

The number of students in attendance was as follows:

DEPARTMENT OF LITERATURE, SCIENCE AND THE ARTS.		
Resident Graduates	15	
Candidates for a Degree	443	
Students not Candidates for a Degree	66 —	524
DEPARTMENT OF MEDICINE AND SURGERY.		
Third Year Students	84	
Second Year Students	118	
First Year Students	132 —	334
DEPARTMENT OF LAW.		
Seniors	143	
Juniors	119 —	262
SCHOOL OF PHARMACY.		
Resident Graduates	4	
Second Year Students	30	
First Year Students	27 —	61
HOMŒOPATHIC MEDICAL COLLEGE.		
Students—Total in the College		34
COLLEGE OF DENTAL SURGERY.		
Students—Total in the College		80
		1295

Compared with the preceding year there was a decline in attendance in every Department except in the Dental, where there was a slight gain. There can be no doubt that the decline was largely due to business depression. We knew of many who had completed their preparatory studies with the intention of coming, but who found themselves at the opening of our Academic year unprovided with the necessary means to meet even the small expense of a student's life here. This year opens with every prospect of a large increase in attendance.

The number of women in the University was 196, being 16 more than in the preceding year. They were distributed in the several Departments as follows:

Department of Literature, Science and the Arts	119
Department of Medicine and Surgery	56
Law Department	2
School of Pharmacy	1
Homœopathic Medical College	10
College of Dental Surgery	8
	196

The number of women was 15 per cent. of the total attendance, while in the previous year it was only 13 per cent. The principal part of the increase in the attendance of women was in the Department of Medicine and Surgery.

As usual, our students are drawn from every part of this land and from several foreign lands. The fact that we are instructing so many students, whose home is not in Michigan, often calls out the suggestion that a State Institution like this ought to charge higher fees than it does for such persons, and so increase its resources. This seems so plausible that it may be well to give the subject a little consideration.

It seems not to be understood by all that an important discrimination is now made between the fees of Michigan students and those of non-resident students. The charges are as follows: For admission, to Michigan students, ten dollars; to all others, twenty-five dollars; the annual fee for the Literary department, for Michigan students, twenty dollars, for all others, thirty dollars; in all other Departments, for Michigan students, twenty-five dollars, for all others, thirty-five dollars. We may say with approximate accuracy that the fees for non-resident students are about fifty per cent. greater than those for Michigan students.

Furthermore, it is understood by very few outside of the University, that when instruction is given by lectures, as it is mainly in the Professional Schools and to some considerable extent in the Literary Department, the attendance of the non-resident students adds little or nothing to the expense of instruction, and therefore the fees received from them are almost clear gain to the treasury. One may lecture to four hundred students from several States as easily as to one hundred from Michigan alone. During a large part of the history of the Law School the fees from non-resident students alone in that school have more than paid the current expenses of it. It so happens that the proportion of non-resident students in the Professional Schools is much larger than in the Literary Department, being 60 per cent. in the former and 40 per cent. in the latter.

Having regard simply to the pecuniary advantage of the University, the policy of the Regents should be to make the fees of non-resident students as high as possible without diminishing materially the number. They might be fixed so high as to cut off attendance from other States. For it must be remembered that in the Western States, from which we draw most of our non-resident students, education is furnished by good Colleges and State Universities at very low rates. In some of them there is no charge for tuition. The fees have been raised in this University twice in the last eight years. In 1877 the annual fee and the diploma fee were each increased five dollars. In 1882 the annual fee for non-resident students in the Literary Department was again increased five dollars and in the Professional Schools ten dollars. The fees exacted of students from other States are now larger than they are in several prominent western institutions.

Now we are confronted with the rather unwelcome fact, that since the last increase in the fees in 1882 the number of non-resident students has rapidly and steadily decreased, while the attendance of Michigan students has been very steady, as the following table will show:

ATTENDANCE OF STUDENTS.

Year.	From Michigan.	Non-Residents.	Total.
1881-2	688	846	1,534
1882-3	671	769	1,440
1883-4	670	707	1,377
1884-5	644	651	1,295

The annual fees due from non-resident students in 1881-2 were $21,100, while under the higher rates now asked they amounted in 1884-5 to only $21,800. If there is no other cause than the increase of fees operating to diminish the attendance of students from abroad, it is obvious that little has been gained by that increase.

There can be no doubt that other causes are coöperating with this. The institutions, especially the State Universities, in the Western States, have been enlarging their Faculties and improving their instruction, so that students find near their own homes the education they seek. The lengthening of terms in our Professional Schools, especially in the Law School, and the depression in business for the past two years have also had their effect. But I think the figures do show conclusively that even on pecuniary grounds we cannot now afford to increase our charges to non-resident students.

I need hardly say that, for the advantage of the Michigan students themselves and for the reputation and usefulness of the University, it is in the highest degree desirable that it continue to attract students from every part of this country and from foreign lands. One of the most valuable elements in the education of every student who comes here is found in the opportunity and the necessity of mingling with associates from all parts of the world. It would be a great weakening of our strength and of our influence, if the cosmopolitan character of the University community should be exchanged for a narrow and local character. I believe that the State is as proud as we are of the power which the University has had from its early days to attract so many students from distant homes, and would regret the adoption of any policy which should practically limit its constituency to our own State.

I cannot speak too warmly of the earnest, manly and studious spirit which has pervaded the University in recent years. I believe that the professors in the Literary Department are agreed in the opinion that the introduction of the elective system into the last two or two and a half years of the collegiate courses has contributed much to this result. There has been in years past much undiscriminating criticism by some ultra-conservative college officers in the east of any attempt at modifying the old iron-clad curriculum. But it is noteworthy that the very colleges which have been the sources of this criticism are themselves introducing the elective system into the latter half of the course. The commendations of it, which the men who have so stoutly opposed it are now forced to make in justification of the change, form interesting reading to those of us who have long believed that there was no solution of the problem of meeting the demands properly made on American colleges, save by introducing some flexibility into the old traditional curriculum. The fear often expressed that students will generally abuse or unwisely use the liberty granted them of choosing to some extent their studies has not been shown by our experience to be well founded. Doubtless a few indolent persons will elect what they regard as easy work. But they will even then accomplish as much as they do when forced to attempt hard work, which they never perform, except in the most perfunctory manner. No plan will make the college career of lazy men brilliant. The advantage to industrious men of generous liberty of choice of studies, after they have made a fair advance in fundamental and elementary studies, is very pronounced. And the work of a college should be organized to meet the needs of the earnest and aspiring students rather than the infirmities and defects of the indolent.

It will be remembered that last year we decided to extend to schools outside of Michigan, on the same conditions as those imposed on Michigan schools, the privilege of sending students here to be received without examination. Schools in New York, Illinois, Minnesota and California, have already availed themselves of the privilege. We are still confident that this enlargement of our plan of accepting students "on diploma from those approved schools," which we have carefully inspected, will work no harm to Michigan schools and will be of advantage to the University. We have reason to believe that several important preparatory schools in other States will soon establish this connection with us.

Special attention has been given during the past year to enlarging the facilities for shop-work needed by our students of engineering. As only about one-third of the number who desire to take such work could be accommodated by us, we asked the Legislature for an appropriation for a larger building and for more machinery. Though the grant made was smaller than we wished, it will enable us to erect a building much larger than our old one, and to procure a moderate outfit of machines and tools for it. It is expected that the new structure will be completed by the 1st of January next.

There is just now a wide-spread desire to combine more or less use of tools with all grades of instruction from the primary school up to the highest technical schools. Probably our nation is just now following its normal tendency to push a new experiment too far and to expect from it more than it can yield. This is not the place to discuss the general subject. But the question has been forced upon us for careful consideration, what is the duty of a University, and especially of this University, in furnishing opportunities for shop-work? Some have thought that we ought to organize a manual training school, in which to instruct in elementary mathematics, drafting and kindred studies and in the use of tools, young men who are to earn their living as skilled mechanics. That is a very useful and much needed work, but it does not seem to be a part of the work of an institution like this. Our plain duty seems to be to limit our mechanical outfit and our instruction in mechanical processes by the needs of the students of civil, mining and mechanical engineering. These needs already call for a larger equipment than we shall have after our legislative appropriation is exhausted. There is room here for private generosity to supplement public aid. We are encouraged to hope for some large exhibition of private liberality by the deep interest which the manufacturers of costly machinery have shown through their numerous and valuable gifts.

The legislative appropriations for the years 1885–6 were as follows: For repairs and contingent expenses for 1885, $16,000; for 1886, $16,000; for books for the libraries for 1885, $5,000; for 1886, $5,000; for the Homœopathic College and Hospital for 1885, $6,200; for 1886, $6,200; for the University Hospital for 1885, $5,000; for 1886, $5,000; for the Dental College for 1885, $8,000; for 1886, $8,000; for a clock, $2,000 in 1885; for assistance in the Engineering Laboratory for 1885, $1,000; for 1886, $1,000; for increase in the salaries of the law professors for 1885, $2,800; for 1886, $2,800; for the removal of the gifts of Randolph Rogers from Rome in 1886, $2,500; for the Engineering Laboratory for 1885, $10,000; for 1886, $5,000. Total for 1885, $56,000; for 1886, $51,500.

A bill to increase our one-twentieth mill tax to one-tenth of a mill passed the Senate almost without opposition, but failed by a few votes to pass the House.

During the past fifteen months the University has received gifts of a magnitude altogether beyond precedent in its history. The bequest of the Lewis Gallery of Art, comprising more than seven hundred paintings and pieces of statuary, was referred to in my last report. In February last, Christian H. Buhl, Esq., of Detroit, presented to the University about five thousand volumes of law books to be added to our Law Library. This more than doubled the number of volumes in that Library, and the additions consisted largely of Reports which supplemented and rendered more nearly complete our collections. A little later the distinguished sculptor, Randolph Rogers, of Rome, announced to us that he was about to send us a complete collection of the models and casts of his works, more than seventy in number. They include busts and full-length statues of many eminent men, monuments in commemoration of events in our history, especially in our civil war, the bronze doors of the Capitol, and ideal figures, which have given the artist a world-wide reputation. Mr. Rogers spent some of the years of his early manhood in this city, has always cherished a warm interest in the University, and therefore desires that the fruits of his long and brilliant artistic life shall be preserved here. On being informed of Mr. Rogers's generous intentions, the Legislature very promptly made an appropriation for defraying the expense of the transportation of the works of art from Rome. Last spring having learned that the Exhibit which the Chinese Government had sent to the New Orleans Exposition would probably be bestowed on some public institution, I ventured to ask Sir Robert Hart, Inspector General of the Chinese Maritime Customs, under whose direction the Exhibit had been prepared, if the University could receive a part or the whole of the articles contained in it. In July I received the welcome information that the entire collection had been given to us, although some other very prominent institutions were applicants for it. It consists of several thousand articles, for the most part such as illustrate the industrial products and processes of the Chinese, and especially the growth and the manufacture of cotton. There is a number of objects in porcelain, and a considerable collection of the costumes worn by people in different stations of life. As an addition to our ethnological and industrial museums, this Chinese Exhibit is very valuable.

In speaking in my last report of the gift of the Lewis gallery, I called attention to the obvious necessity which such a bequest laid upon us of preparing at an early day for the organization of a School of Fine Arts. The appeal for such preparation is now greatly strengthened by the gift of the Randolph Rogers Collection. At no other University in the country is there a gallery of art comparable to that which these two great benefactions will place in our possession. It would be deliberately flinging away our opportunities and evading our plain duties, if with such facilities in our hands we should neglect to provide for instruction in the Fine Arts which will be so admirably illustrated here. It is furthermore an important subject for consideration whether a new building will not be needed to receive and suitably display the treasures which have been so generously bestowed upon us. Our present galleries for painting and sculpture are admirably adapted for collections of moderate extent. But the Rogers and Lewis Collections would overcrowd them both.

In speaking of gifts of works of art, I would not forget the most acceptable gift of a three-quarters length, life-size portrait of the late Governor Bagley, presented by Mrs. Bagley in compliance with the request of some of the officers of the University. We are hoping we may secure the portraits of a good number of the benefactors of the institution, to be placed by the side of Governor Bagley's in the large reading room of the library or in some other suitable hall. It is much to be regretted that the attempt to obtain the portraits of the founders and especially of the earlier professors had not been made years ago. Many of them it will now be impossible to procure. But a hearty co-operation by the friends of the University will enable us still to make a collection which will be of the greatest interest and value.

Turning to the Professional Schools, we find that in the Department of Medicine and Surgery and the School of Pharmacy the work has gone on in the usual efficient manner. The former is incommoded by the want of room. Another building is greatly needed for the dissecting-room and for other purposes. The erection of such a structure cannot properly be much longer delayed. The powerful and widespread influence of our School of Pharmacy in elevating the grade of pharmacists' education and work is often and warmly recognized by their journals and associations. Papers written by our students and embodying the results of their researches are not unfrequently published in the English Chemical and Pharmaceutical Magazines.

In the Law School more rigorous methods of instruction have to some extent been introduced. Quizzing and careful mastery of certain text books occupy the attention of the student much more than formerly. I cannot resist the conviction that whenever the teaching force is large enough, it would be highly beneficial to grade the work more carefully, and to teach the classes separately more than is now the practice.

The Homœopathic Medical College suffered severely during the whole year, from the serious illness of Dr. Wilson and Dr. Obetz at the very opening of the term. A number of students were diverted from the school by the fear that the usual instruction would not be given. The attendance was therefore very small and the circumstances under which work was carried on were very depressing. The School had also to encounter the usual amount of hostility and criticism from certain homœopathic physicians, whose unfriendliness to it is the most serious obstacle to its progress. The Faculty has been recruited with earnest and vigorous men, and it is hoped that the next year will be much more prosperous than the last. The homœopathic profession can hardly expect the State to maintain long, at the expense of $12,000 a year, a school which they cannot with some fair degree of harmony and enthusiasm assist at least by sending their students to its lecture rooms. The Regents have given to no Department of the University more care and labor.

They must leave it to the homœopathic physicians to say whether it shall have a sickly or a vigorous life.

The Dental College continues to show every sign of prosperity. The lengthening of the term to nine months did not, as we expected it would, reduce the number of students. On the contrary the attendance last year was larger than ever before. The rooms are too strait for the classes. Apparently we must soon enlarge the building or cut off some of the applicants for admission by more rigorous preliminary examinations. But these examinations are now quite as exacting as those for admission to the Law and Medical Schools.

The sum provided by the Legislature for repairs during this year has been judiciously expended and has enabled us to make our buildings more comfortable and attractive. An equal sum is available for next year, and can be most usefully employed. I think that the buildings of no public institution of the State were in so dilapidated a condition as ours, (with the exception of the Library) when this appropriation was voted us. It will be economical not to allow them again to remain so long without thorough repairs.

It appears by the Librarian's report that in all our libraries we now have 56,091 volumes, 12,204 unbound pamphlets, and 211 charts; of these there are in the General Library 44,130 volumes, 10,527 unbound pamphlets, and 211 charts; in the Medical Library 2,906 volumes, and 677 pamphlets; in the Law Library 9,055 volumes; and in the Dental Library 258 volumes. As elsewhere stated, more than half the volumes in the Law Library have been placed there this year by the generosity of C. H. Buhl, Esq., of Detroit. Exclusive of that gift, the increase in the libraries during the year has been 2,246 volumes and 1,054 pamphlets, of which there has been presented 706 volumes and 1,054 pamphlets. The number of periodicals taken is 175. The number of volumes drawn during the year has been 89,388. Few, if any, libraries are so much used.

The following facts concerning the several museums are obtained from the annual reports of the curators, herewith submitted.

In the palæontological department the entire collection of the proboscidian remains have been investigated, arranged and labeled by Dr. Winchell, and much work has been done by him in a careful study of the difficult group of the *stromatophoridae*. A large part of our specimens has been better arranged and labeled, and the larger part of Dr. Rominger's valuable collection has been received on deposit. It is greatly to be desired that this collection should be permanently secured for the University.

Though our funds have not been adequate to the increase of our mineralogical and lithological collections this year by purchase, several very acceptable gifts have been received from friends, whose interest in the University is heartily appreciated. Among those contributions may be specially named a set of rock specimens from the Bay Port quarries, presented by Hon. Wm. L. Webber, a box of specimens selected at the New Orleans Exposition by Commissioner Edward Kanter, and a set of 65 specimens illustrating the copper and silver ores near Glendale, Montana, sent by one of our young graduates, F. A. Ross. Dr. Rominger has deposited with us a collection of over 3,500 specimens, mostly lithological, mainly from the iron regions along the Menominee River and near Marquette and Ishpeming, and with them he has furnished about 450 slides and sections prepared for study with the microscope. Favorable opportunities for the purchase of valuable specimens for the above museums are constantly presenting themselves. It would be judicious to appropriate, when the condition of our treasury will allow, a certain moderate sum each year for supplying by purchase some of the most serious deficiencies in our collections.

Considerable progress has been made in identifying, arranging and labeling our collections in zoölogy and some important additions to them have been received. We have large numbers of duplicate specimens, which could be made useful in exchange, if more assistance could be afforded in identifying them. The ethnological and industrial collections are greatly enlarged by the reception of the Chinese Exhibit. But a large part of the zoölogical and ethnological collections is still undisplayed for lack of cases. All the unoccupied room in the museum can at once be wisely filled with cases, if we have the means to construct them.

Some additions have been made to the Dental Museum and the Homœopathic Museum. Several individuals have presented valuable specimens to the Museum of the Department of Medicine and Surgery and some two hundred specimens have been prepared by the curator and students. More case-room is urgently asked for.

The Museum of Applied Chemistry has been enlarged by a collection of rare medicinal drugs mostly of Asiatic origin, presented by Messrs. F. Stearns & Co., of Detroit, who promise additional articles of the same class which they are gathering from various parts of the world, and by about one hundred and fifty specimens of common commercial articles, chiefly pigments and dye-stuffs, for practical use in study. Messrs. Parke, Davis & Co., of Detroit, are about to send us a large general collection of crude drugs and pharmaceutical preparations classified upon the order of therapeutic action. The collections of pharmaceutical material still need to be much extended to meet the real wants of such a School of Pharmacy as ours.

The most important matter reported by the Curator of the Museum of Art is the gift of the Rogers models and casts already referred to. He also announces the gift by the last graduating class in the Literary Department, as a memorial of their deceased class-mate, Frank K. Ferguson, of a full size cast of the celebrated colossal statue of Niobe. He has also been able to purchase with the proceeds of the sale of the Museum Catalogue, a cast of the well known Torso of Amor, by Praxiteles. Both of these works are on the way from Europe. The Art Museum and the Scientific Museum have been visited by large numbers of persons.

The report of the Finance Committee* shows that the problem of making our receipts cover our expenses, without embarrassing our work, is still a serious one. It is difficult for us to provide for continuing our instruction by its present methods and on the present scale. Furthermore, the rate of compensation of many of our teachers is below that paid in other institutions of similar rank and in many of inferior rank, and is in my judgment somewhat less than it ought to be. It should as soon as possible be made what it was in 1878. But we cannot and ought not to be content with the same grade and methods of work year after year. The progress of science and of education is constantly pressing new demands upon us. These we cannot ignore. Not to advance is to fall behind other institutions and to be unequal to the real needs of our students. Subjects must now be taught which thirty years ago we were not called to consider in our curriculum.

---

*See Appendix A.

What may be called the laboratory method of teaching most of the sciences has been shown to be so far superior to old methods of teaching them merely by text book and lecture that we must resort to it. But it renders necessary a large teaching force, more room, more apparatus. Under our elective system we gladly invite students to carry special studies much farther than they formerly could. All this enlargement and specialization of instruction involves increased expense. But for a University to make no change in the scope and manner of its work, as the research of scholars is rapidly widening the domain of learning, is to decline, to degenerate, to begin to die. Continually to advance is the indispensable condition of vigorous life. The friends of the University, the State of Michigan as its chief patron may as well, first as last, face the fact that the expenditures of the University must, not rapidly perhaps, but yet steadily and constantly increase, if the institution is to retain that eminent position of which the State has been so proud. And why should not the State regard this fact with complacency, while her own resources are so steadily and rapidly increasing, and in all human probability are destined to go on increasing indefinitely? The most generous support of the University can never become a heavy burden to this rich and prosperous commonwealth. By the intelligence which the University has already diffused among the children of Michigan, by the large number of gifted and useful men, who have been attracted by her to the State as students and have remained as influential citizens, by her inspiring and elevating influence upon all the schools of the State, this institution, it may with modesty be claimed, has made a generous return to Michigan for every dollar expended for her support. How often have we heard eminent citizens from other parts of the country say that their States would be glad to pay to Michigan thrice what the University has cost, if they could take it with its history, its prestige and its power within their domain. I believe that the citizens of this State only need to know more intimately the work and the needs of the University to provide well for it. The State is so large, the homes of a large part of the citizens are so remote from us, that it is impossible for more than a small portion of them to have an acquaintance with the inner life of the institution. But our graduates are becoming so numerous that they are now found in every part of the State and loyally represent us and enthusiastically report our work to their neighbors. We confidently believe therefore that the University will gain a stronger and stronger hold on the respect and affection of the State. If its means shall not increase as rapidly as we could wish, still the good commowealth whose name it bears will see that its future development is not altogether unworthy of what its past history has promised.

JAMES B. ANGELL,
President.

APPENDIX A.

REPORT OF FINANCE COMMITTEE.

The Finance Committee of the Board of Regents herewith present the Treasurer's statement of receipts and expenditures for the fiscal year ending September 30, 1885, and their estimates for the year ending September 30, 1886.

The Committee have caused the books and accounts of the Treasurer to be examined and checked, and have found satisfactory evidence of the correctness of all the items included in the Treasurer's report.

The receipts and the disbursements for the year have both been larger than was estimated a year ago. The estimated receipts were largely increased by the liberality of the Legislature, in making the appropriations that were asked by the Regents; and the disbursements have been very materially enlarged by the change in the time of paying salaries. The results of this change are that the present year's report includes five quarterly payments, and that there is at present no pay roll outstanding, as has usually been the case at the time of making the annual reports.

The large increase in the sum received from students is explained by the fact that in 1884 the Treasurer's accounts were closed on the 27th of September, and that about $11,000.00 of receipts from that source, that properly belonged in the report for 1883–84, are included in the report of the present year.

Notwithstanding the assistance furnished by the Legislature, the Finance Committee are compelled to report that the disbursements have increased at such a rate as to absorb all the increase of revenue, and the balance on hand at the beginning of the year has been reduced by the sum of $4,858.08. The General Fund is also overdrawn by the sum of $1,941.51.

In making their estimates for the year 1885–86, they find also that, even when providing most economically for imperative demands and omitting many items they would like to include, the balance on hand will probably be further reduced by the sum of nearly $15,000.00 by the end of September, 1886; and the greater part of this reduction will have to be borne by the General Fund.

E. O. GROSVENOR,
C. J. WILLETT,
Finance Committee.

ESTIMATE OF RECEIPTS FOR THE YEAR ENDING SEPTEMBER 30, 1886.

Balance in Treasury, October 1st, 1885			$22,153 86
To be received	for	University interest	38,000 00
"	"	1-20 Mill Tax	40,500 00
"	"	Homœopathic Department	14,200 00
"	"	University Hospital	5,000 00
"	"	College of Dental Surgery	8,000 00
"	"	Mechanical Laboratory	10,000 00
"	"	Repairs and Contingent Expenses	16,000 00
"	"	Salary of Law Professors	2,800 00
"	"	Library	5,000 00
"	"	Assistant in Mechanical Laboratory	1,000 00
"	"	Transporting Rogers' Collection	2,500 00
"	"	from Students' Fees and Deposits	60,000 00
"	"	Sale of Dental Supplies	2,500 00
"	"	Sale of Anatomical Material	600 00
"	"	Sales at University Hospital	500 00
"	"	Sales at Homœopathic Hospital	200 00
"	"	for Interest on Deposits	300 00
			$229,253 86

ESTIMATE OF EXPENSES.

For Salaries of Professors, Officers, and Employés	$137,000 00
" Repairs and Contingent Expenses	16,000 00
" Fuel and Lights	11,000 00
" Current Expenses of General Library	400 00
" Medical Library	50 00
" Law Library	50 00
" Grounds	500 00
" Postage	600 00
" Insurance	480 00
" Calendar, Regents' Proceedings, and Miscellaneous Printing	2,000 00
" Museum	300 00
" Supplies for Chemical Laboratory	8,000 00
" Botanical Laboratory	100 00
" Histological "	350 00
" Physiological "	400 00
" Mechanical "	400 00
" Microscopical "	200 00
" Physical "	100 00
" General Chemistry	500 00
" Department of Biology	300 00
" " Engineering	400 00
" " Anatomy	2,500 00
" Astronomical Observatory	300 00
" Advertising Literary Department	300 00
" " Medical Department	200 00
" " Law Department	200 00
" " Pharmacy Department	200 00
" Cases for Chinese Exhibit	1,000 00
" Purchase of Books for Libraries	6,500 00
" Current Expenses of University Hospital	3,000 00
" " " Homœopathic Department	4,000 00
" " " College of Dental Surgery	2,500 00
" Clock	2,000 00
" Transportation of Rogers' Collection	2,500 00
" Lease of Water Privilege	75 00
" Purchase and filling of Diplomas	600 00
" Commencement Expenses	1,200 00
" Taxes on Lots in Springwells	75 00
" Furniture	100 00
" Engineering Laboratory Building	15,000 00
Estimated Balance on hand Sept. 30, 1886	7,873 86
	$229,253 86

E. O. GROSVENOR,
J. J. VAN RIPER,
CHAS. J. WILLETT,
Committee.

To the Committee on Finance, Board of Regents, University of Michigan:

GENTLEMEN: Herewith I submit a statement of the receipts and disbursements of this office for the fiscal year ending September 30th, 1885.

Respectfully,

H. SOULE,
Treasurer.

RECEIPTS.

Balance in Treasury October 1st, 1884		$27,011 94
Received from State Treasurer, acct. State Aid 1-20 Mill Tax	$40,500 00	
“ “ “ “ “ University Interest	38,521 02	
“ “ “ “ “ Additional Professor	2,200 00	
“ “ “ “ “ Assistant in Mechanics	1,000 00	
“ “ “ “ “ Homœopathic College	8,000 00	
“ “ “ “ “ University Hospital	5,000 00	
“ “ “ “ “ Libraries	5,000 00	
“ “ “ “ “ Dental College	8,000 00	
“ “ “ “ “ Increase of law salaries	2,800 00	
“ “ “ “ “ Repairs and Contingent	16,000 00	
“ “ “ “ “ Engineering Laboratory	5,000 00	
“ “ “ “ “ Clock	2,000 00	— 134,021 02
“ “ University Hospital	$ 828 31	
“ “ Homœopathic Hospital	197 09	
“ “ General Library	1 00	
“ “ Dental College	3,048 76	
“ “ Anatomical Sales	1,086 10	
Received from Interest	226 86	
“ “ Miscellaneous	615 53	
“ “ “ Law duplicate Books sold	75 00	6,078 65
“ “ Students' Fees		72,956 08
		$240,067 69

DISBURSEMENTS.

Paid Salaries of Officers, Professors and Employés	$160,837 84	
“ Vouchers acct. General Fund, current expenses	32,987 95	
“ “ “ Homœopathic College, current expenses	2,510 62	
“ “ “ Dental College, “ “	2,521 53	
“ “ “ General Library, “ “	3,520 02	
“ “ “ University Hospital “ “	2,120 32	
“ “ “ Homœopathic Hospital, “ “	799 23	
“ “ “ Eye and Ear Ward, “ “	2 77	
“ “ “ Physical Laboratory, “ “	1,293 33	
“ “ “ Physiological Laboratory, “ “	520 27	
“ “ “ Engineering Laboratory, “ “	195 38	
“ “ “ Repairs and Contingent “ “	10,604 57	— $217,913 83
Balance in Treasury Sept. 30th, 1885		22,153 86
		$240,067 69

RECAPITULATION.

RECEIPTS TO THE GENERAL FUND.

Balance in Treasury Oct. 1, 1884		$16,545 08
From State Treasurer, acct. State Aid	$40,500 00	
“ “ “ “ Interest	38,521 02	
“ First National Bank Interest on Deposits	226 86	
“ Sale of Anatomical Material to Medical Schools	1,086 10	
“ Miscellaneous sources	690 53	— $81,024 51
“ Students' Fees, acct. Medicine and Surgery	$16,585 00	
“ “ “ “ A. and A. Chemistry	8,169 08	
“ “ “ “ Literary	14,155 00	
“ “ “ “ Law	16,425 00	
“ “ “ “ Dental	4,572 00	
“ “ “ “ Pharmacy	2,655 00	
“ “ “ Mechanical	237 00	

From Students' Fees, acct. Homœopathic College	$1,765 00	
“ “ “ “ General Chemistry	224 00	
“ “ “ “ Practical Anatomy	3,555 00	
“ “ “ “ Microscopical	207 00	
“ “ “ “ Histological	682 00	
“ “ “ “ Diplomas	3,725 00	
	$72,956 08	
Less returned fees	3,167 01 —	$69,789 07
		$167,358 66
Balance overdrawn		1,941 51
		$169,300 17

DISBURSEMENTS FROM THE GENERAL FUND.

Paid Salaries to Officers, Professors and Employés	$139,367 94	
“ Vouchers acct. Contingent	3,583 28	
“ “ “ Alterations and Repairs	1,210 37	
“ “ “ Fuel and Lights	10,913 86	
“ “ “ General Library	409 24	
“ “ “ Medical Library	302 15	
“ “ “ Law Library	241 01	
“ “ “ Grounds	475 34	
“ “ “ Postage	495 35	
“ “ “ Insurance	80 00	
“ “ “ Advertising	761 81	
“ “ “ Museum	167 08	
“ “ “ Chemical Laboratory	5,318 82	
“ “ “ Botanical Laboratory	61 40	
“ “ “ Histological Laboratory	172 62	
“ “ “ Microscopical Laboratory	49 21	
“ “ “ General Chemistry	574 71	
“ “ “ Engineering	365 99	
“ “ “ Astronomical Observatory	124 60	
“ “ “ Furniture and Apparatus	10 50	
“ “ “ Anatomical	2,170 45	
“ “ “ Physical Laboratory	9 72	
“ “ “ Physiological Laboratory	132 98	
“ “ “ Chinese Exhibit	332 92	
“ “ “ Advertising Medical Department	206 48	
“ “ “ “ Law “	212 10	
“ “ “ “ Pharmacy “	153 35	
“ “ “ Calendar	899 75	
“ “ “ Mechanical Laboratory	385 90	
“ “ “ Transfer from Mechanical Laboratory	111 29 —	$169,300 1

SPECIAL FUNDS.

HOMŒOPATHIC COLLEGE.

Receipts.

Balance in Treasury Oct. 1st, 1884	$2,188 32	
From State Treasurer	8,000 00 —	$10,188 3

Disbursements.

Paid Salaries of Professors and Employés	6,819 90	
“ Vouchers for Current Expenses	2,510 62	
Balance in Treasury Sept. 30th, 1885	857 80 —	10,188 3

ADDITIONAL PROFESSOR.

Receipts.

From State Treasurer	2,200 00 —	2,200 0

Disbursements.

Paid Salary of Professor	$2,200 00 —	$2,200 00

UNIVERSITY HOSPITAL.

Receipts.

Balance in Treasury Oct. 1st, 1884	600 02	
From State Treasurer	5,000 00	
" Material Sold	828 31 —	6,428 33

Disbursements.

Paid Salaries of Surgeon and Employés	2,037 50	
" Vouchers for Current Expenses	2,120 32	
Balance in Treasury Sept. 30th, 1885	2,270 51 —	6,428 33

HOMŒOPATHIC HOSPITAL.

Receipts.

Balance in Treasury Oct. 1st, 1884	1,002 16	
From Sale of Material	197 09	
Balance Overdrawn Sept. 30th, 1885	462 48 —	1,661 73

Disbursements.

Paid Salaries of Surgeon and Employés	862 50	
" Vouchers for Current Expenses	799 23 —	1,661 73

EYE AND EAR WARD.

Receipts.

Balance in Treasury Oct. 1st, 1884	2 77 —	2 77

Disbursements.

Paid Vouchers for Current Expenses	2 77 —	2 77

GENERAL LIBRARY.

Receipts.

Balance in Treasury Oct. 1st, 1884	3,380 78	
From State Treasurer	5,000 00	
" Sundry Sources	1 00 —	8,381 78

Disbursements.

Paid Vouchers Current Expenses	3,520 02	
Balance in Treasury Sept. 30th, 1885	4,861 76 —	8,381 78

MECHANICAL LABORATORY.

Receipts.

Transferred to General Fund Account	111 29 —	111 29

Disbursements.

Balance Overdrawn Sept. 30, 1884	111 29 —	111 29

ASSISTANT IN MECHANICAL LABORATORY.

Receipts.

From State Treasurer	1,000 00 —	1,000 00

Disbursements.

Paid Salary	1,000 00 —	1,000 00

PHYSIOLOGICAL LABORATORY.

Receipts.

Balance in Treasury Oct. 1st, 1884	731 63 —	731 63

Disbursements.

Paid Vouchers Current Expenses	520 27	
Balance in Treasury Sept. 30th, 1885	211 36 —	731 63

PHYSICAL LABORATORY.

Receipts.

Balance in Treasury Oct. 1st, 1884	1,384 75 —	1,384 75

Disbursements.

Paid Vouchers Current Expenses	1,293 33	
Balance in Treasury Sept. 30th, 1885	91 42 —	1,384 75

DENTAL COLLEGE.

Receipts.

Balance in Treasury Oct. 1st, 1884	$1,287 72	
From State Treasurer	8,000 00	
" Sale of Material and Appliances	3,048 76 —	$12,336 48

Disbursements.

Paid Salaries, Professors and Employés	5,750 00	
" Vouchers, Current Expenses	2,521 53	
Balance in Treasury Sept. 30th, 1885	4,064 95 —	12,336 48

INCREASE OF SALARIES, LAW PROFESSORS.

Receipts.

From State Treasurer	2,800 00 —	2,800 00

Disbursements.

Paid Salaries to Professors	2,800 00 —	2,800 00

ENGINEERING LABORATORY.

Receipts.

From State Treasurer	5,000 00 —	5,000 00

Disbursements.

Paid Vouchers, Current Expenses	195 38	
Balance in Treasury Sept. 30th, 1885	4,804 62 —	5,000 00

UNIVERSITY CLOCK.

Receipts.

From State Treasurer	2,000 00 —	2,000 00

Disbursements.

Balance in Treasury Sept. 30th, 1885	2,000 00 —	2,000 00

STATEMENT OF SPECIAL FUNDS.

Balances in Treasury Sept. 30th, 1885.

In Homœopathic College	$ 857 80	
University Hospital	2,270 51	
General Library	4,861 76	
Physiological Laboratory	211 36	
Physical "	91 42	
Dental College	4,064 95	
Clock	2,000 00	
Engineering Laboratory	4,804 62	
Repairs and Contingent	5,395 43	
	$24,557 85	
Deduct Overdrawn Balance in Homœopathic Hospital		$462 48
" " " General Fund Account		1,941 51
Balance in Treasury Sept. 30th, 1885		22,153 86
		$24,557 85

APPENDIX B.

An Act making an appropriation for the use and maintenance of the University of Michigan.

Section 1. *The People of the State of Michigan enact,* That there shall be and is hereby appropriated out of the State Treasury, for the use and maintenance of the University of Michigan, the following sums, to-wit:

For the year eighteen hundred and eighty-five, fifty-six thousand dollars ($56,00C.00), and for the year eighteen hundred and eighty-six, fifty-one thousand and five hundred dollars ($51,500.00) for the following purposes: For repairs and contingent expenses, for the year eighteen hundred and eighty-five, the sum of sixteen thousand dollars ($16,000.00); and for the year eighteen hundred and eighty-six, the sum of sixteen thousand dollars ($16,000.00); for books for libraries, for the year eighteen hundred and eighty-five, the sum of five thousand dollars ($5,000.00) and for the year eighteen hundred and eighty-six, the sum of five thousand dollars ($5,000.00); for the homœopathic college and hospital for the year eighteen hundred and eighty-five, the sum of six thousand two hundred dollars ($6,200.00); and for the year eighteen hundred and eighty-six, the sum of six thousand and two hundred dollars ($6,200.0C); for the University hospital for the year eighteen hundred and eighty-five, the sum of five thousand dollars ($5,000.00); and for the year eighteen hundred and eighty-six, the sum of five thousand dollars ($5,000.00); for the dental college, for the year eighteen hundred and eighty-five, the sum of eight thousand dollars ($8,000.00); and for the year eighteen hundred and eighty-six, the sum of eight thousand dollars ($8,000.00); for a clock for the University, the sum of two thousand dollars ($2,000.00) for the year eighteen hundred and eighty-five; for assistance in engineering laboratory, for the year eighteen hundred and eighty-five, the sum of one thousand dollars ($1,000.00); and for the year eighteen hundred and eighty-six, the sum of one thousand dollars ($1,000.00); for increase in the salaries of the law professors, for the year eighteen hundred and eighty-five, the sum of two thousand and eight hundred dollars ($2,800.00); and for the year eighteen hundred and eighty-six, the sum of two thousand and eight hundred dollars ($2,800.00); also in eighteen hundred and eighty-six, a sum not exceeding two thousand five hundred dollars ($2,500.00), for the removal of the gifts of Mr. Rogers, and providing that only so much of said sum as is needed for the purpose shall be drawn by the University. For the engineering laboratory for the year eighteen hundred and eighty-five, the sum of ten thousand dollars ($10,000.00); and for the year eighteen hundred and eighty-six, the sum of five thousand dollars ($5,000.00).

Sec. 2. There shall be assessed upon the taxable property of the State in the year eighteen hundred and eighty-five, the sum of fifty-six thousand dollars ($56,000.00), and in the year eighteen hundred and eighty-six the sum of fifty-one thousand five hundred dollars ($51,500.00), which sums shall be assessed, levied and collected in the same manner as other State taxes are assessed, levied and collected, and which taxes when collected, shall be credited up to the general fund to re-imburse the same for the amount drawn therefrom as provided in section one of this act.

This act is ordered to take immediate effect.

Approved June 16th, 1885.

APPENDIX C.

EXAMINATIONS FOR DEGREES.

The following examinations were held in 1885:

GRADUATES, CANDIDATES FOR MASTER'S DEGREES.

GEORGE BARNES, A. B.

Thesis.—The Religious Policy of Queen Elizabeth. Subjects for Examination: Major—The Reign of the Tudors. Minors—1. Political Economy. 2. English History since 1760.

J. ROSE COLBY, A. B.

Thesis.—A Study of Matthew Arnold. Subjects for Examination: Major—English Masterpieces. Minors—1. German (Lessing). 2. French.

ARTHUR ALGER CROZIER, B. S. (Agricultural College.)

Thesis.—Influence of Climate on Plants. Subjects for Examination: Major—Cryptogamic Botany. Minors—1. Qualitative Chemistry. 2. Organic Chemistry.

FRANK MERRILL DUNLAP, B. S.

Thesis.—Design for a Plant of Hoisting Machinery. Subjects for Examination: Major—Steam Engines and Hoisting Machinery. Minors—1. Shop Management and Practice. 2. Materials of Engineering.

HORACE SPENCER FISKE, A. B. (Beloit College.)

Thesis.—The Direct Study of the English Language and Literature in a College Course. Subjects for Examination: Major—English Masterpieces. Minors—1. German (Goethe and Lessing). 2. Latin (Juvenal and Persius).

EDWARD ADOLPHUS ROSENTHAL, A. B.

Thesis.—The Budget. Subject for Examination: Finance.

UNDERGRADUATES, CANDIDATES FOR GRADUATION ON THE UNIVERSITY SYSTEM.

JOHN PATTERSON DAVIS, received the Degree of A. B.

Subjects for Examination: Major—Constitutional History of England. Minors—1. Political Economy and Finance. 2. German.

ALEXANDER FREDERICK LANGE, received the Degree of A. M.

Thesis.—Syntax of the Cases in "Iwein, Gregorius, and Der Arme Heinrich," and its relation to New High German Usage. Subjects for Examination: Major—German Literature and Language. Minors—1. Pedagogics. 2. English Masterpieces.

EDWIN LINCOLN MOSELEY, received the Degree of A. M.

Thesis.--Adaptation to Environment in the Placental Mammalia. Subjects for Examination: Major—Zoölogy (six courses). Minors—1. Geology: The Mastodon, its structure, zoölogical relations, and paleontological history. 2. Physiology.

IDA ANN MORRISH, received the Degree of M. L.

Thesis.—Lessing's Hamburgische Dramaturgie. Subjects for Examination: Major—German Drama. Minors—1. Elizabethan Drama. 2. French Drama.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent Public Instruction:

SIR: The undersigned, under authority of your office, visited the University, and after careful examination of the several departments and full conferences with the Professors in charge of each, were gratified to find such improvements as the needs of the Institution required to keep pace with its important work, which improvements were limited only by the means at the disposal of the management. Your committee found nothing of public interest to criticise, nor could we suggest needed reforms or enlarged facilities that have not been fairly placed before the State authorities by the reports of the various officers and the Board of Regents.

We are of the opinion that the University is in a healthy and prosperous condition. It's management, under the guidance of the Board of Regents, carried out by the corps of officers and Professors in immediate charge warrants us in commending it to the confidence of the people of Michigan as worthy of a liberal support.

All of which is respectfully submitted.

DAVID H. JEROME,
ISAAC MARSTON,
HENRY N. FRENCH,
Visiting Committee.

STATE BOARD OF EDUCATION.

ANNUAL REPORT.

To the Superintendent of Public Instruction:

SIR: In accordance with the provisions of law, the following report is submitted by the State Board of Eduation for the year ending September 30, 1885:

STATE NORMAL SCHOOL.

The year has been one of marked success, notwithstanding there have been more changes in the faculty of teachers than in any year during the history of the school. Resignations to take effect June 25, 1885, were tendered by Principal Edwin Willits, Prof. Lewis McLouth, Prof. Theodore Nelson, Miss Ency J. Coleman, Miss Fannie E. Goffe and Miss Ann Janette Bignell. The vacancies have all been filled except that of Principal. Prof. Daniel Putnam, Vice Principal, is filling that position.

Principal Willits resigned his position to accept the Presidency of the Agricultural College. Although he had been connected with the school but two years, he had endeared himself to every student, and left an imprint of his work in every department, and the new features inaugurated by him will long be remembered. He has entered upon a broader field of labor, and one more congenial to his tastes. Prof. Lewis McLouth retires from the department of physicial science, after filling that position fifteen years. By faithfulness and energetic work he has placed the department on a high standard of excellence, and to him is largely due the great interest in the sciences throughout the State, which is shown by the introduction of elementary science into the primary and grammar grades of many of our best graded schools. He takes a similar department in the Agricultural College. Prof. Theodore Nelson resigned the chair of English Language and Literature, which he satisfactorily filled one year, to accept the office of Superintendent of Public Instruction, by appointment of the Governor.

The following is a list of the appointments which have been made during the year:

Edwin A. Strong—Physical Science.
Florus A. Barbour—English Language and Literature.
John Goodison—Geography and Drawing.
Anna A. Paton—Instructor in History and German.
Abbie Pearce—Critic in Training School.
Charles E. St. John—Instructor in Physical Science.

Henry T. Coe—Instructor in Mathematics.
Amelia Hale—Instructor in Mathematics.
Ellen H. Murphy—Instructor in History.
Willis Weeks—Instructor in Latin and Greek.

IMPROVEMENTS.

During the year improvements and repairs have been made to the buildings, grounds and sidewalks. The last Legislature appropriated $700 for new sidewalks, which has been expended in building new walks on the north, east and south sides of the grounds, and repairing the other walks. The conservatory building has been reshingled and necessary repairs have been made to the main building.

VISITORS.

The Board appointed the following Board of Visitors to the Normal School:

Hon. Otis A. Critchett, of Monroe; Hon. John Moore, of Saginaw; and Hon. M. Shoemaker, of Jackson.

The Board of Visitors visited the school at different times during the year, and performed their duties in a very satisfactory manner to all the interests of the school. The report of the Board of Visitors will be found in the Appendix.

EXAMINATION QUESTIONS.

The Board has provided suitable questions for use at the regular county examinations, held the last Fridays in March and October; and questions for third grade for special examinations held the last Friday in February, the second Friday in March, the last Friday in April, the last Friday in May, the last Friday in August, the second and last Fridays in September and the last Friday in November.

The county boards of examiners are not required by law to use these questions, but they have been adopted quite generally throughout the State, and the uniformity thus secured is very gratifying, and it is believed that the plan is approved by so many of the county boards that it will soon be quite generally adopted.

STATE EXAMINATIONS.

Same as last report, except the addition of the following names granted State certificates upon invitation:

George S. White, Jackson.
J. W. Simmons, Dowagiac.
Mrs. Cora D. Martin, Paw Paw.
Miss Eliza Benton, East Saginaw.
Miss Nettie Dally, Lake Linden.
James H. Hopkins, Ypsilanti.

Upon examination—Wayne Simmons, Augusta.

TEXT BOOKS ON PHYSIOLOGY, ETC.

The following text-books on Physiology have been approved by the State Board of Education, and the State Board of Health, for use in the public schools of Michigan, in accordance with the provisions of Section 15, Chapter III, of the General School Laws, compilation of 1885. (Act No. 93, Session Laws of 1883.)

The Human Body: An Elementary text-book of Anatomy, Physiology and Hygiene, by H. Newell Martin. Published by Henry Holt & Co., New York, 1884.

Alcohol: Its Effects on Body and Mind, by Eli F. Brown. Published by Normal Publishing House, Indianapolis, Ind.

Physiology and Hygiene, by J. C. Hutchison. Published by Clark & Maynard, New York and Chicago. Edition of 1884, with supplement on Stimulants and Narcotics.

The Laws of Health: Physiology, Hygiene, Stimulants and Narcotics, by J. C. Hutchison. Published by Clark and Maynard, New York and Chicago.

Hygienic Physiology, with special reference to the use of Alcoholic Drinks and Narcotics, by J. D. Steele. Published by A. S. Barnes & Co., New York and Chicago.

Lessons on the Human Body: An Elementary Treatise upon Physiology, Hygiene, and the effects of Stimulants and Narcotics on the Human System, by O. M. Brands. Published by Leach, Shewell & Sanborn, Boston and New York.

First Lessons in Physiology and Hygiene, with special reference to Alcohol, Tobacco, and other Narcotics, by Chas. H. Mills. Published by Eldridge & Brother, Philadelphia, 1884.

Elements of Physiology and Hygiene, by R. T. Brown. Published by VanAntwerp, Bragg & Co., Cincinnati and New York.

The Eclectic Physiology, for use in Schools, by Eli F. Brown. Published by VanAntwerp, Bragg & Co., Cincinnati and New York.

Hooker's New Physiology, revised by J. A. Sewall, M. D., with a Chapter on Alcohol and Narcotics, by Worthington Hooker. Published by Shelden & Co., New York.

First Book in Physiology, by Worthington Hooker. Published by Shelden & Co., New York.

Elementary Physiology and Hygiene.—The Human Body and its Health. A text-book for schools, having special reference to the effects of Stimulants and Narcotics on the Human System, by Wm. T. Smith. Published by Ivison, Blakeman, Taylor & Co., New York and Chicago.

Practical Work in the School Room.—Part I.—The Human Body, by Sarah F. Buckelew and Margaret W. Lewis. Published by A. Lovell & Co., New York.

The Essentials of Anatomy, Physiology and Hygiene. A text-book for Schools and Academies, by R. S. Tracy. Published by D. Appleton & Co., New York.

LIBRARY BOOKS.

Same as last report.

CONCLUSION.

In concluding this report, the members of the Board desire to state that in the discharge of all the duties imposed upon them, they have endeavored to thoroughly understand the full meaning of the law, and to perform their labors for the highest good of the educational interests of the State. In the financial management they have aimed to limit expenditures to the amount of money received, and to use the funds which have been appropriated, with great care, to supply the needs and necessary expenses of every department of the school, in such a manner as to furnish the very best results. The

Board is under obligations to the Governor and the Legislature for liberal appropriations and the many courtesies received, and to the Board of Instruction of the Normal School for the continued friendly relations and co-operation.

BELA W. JENKS,
EDGAR REXFORD,
J. M. BALLOU,
THEODORE NELSON,
State Board of Education.

A.

REPORT OF THE PRINCIPAL FOR THE SCHOOL YEAR 1884-85.

To the Honorable State Board of Education:

GENTLEMEN—I herewith present the report of the State Normal School for the academic year 1884-85.

The school year was fully as prosperous as the friends of the institution had expected. The attendance in all the Departments was as follows:

Normal Department		520
Training School:		
Primary Department	124	
Grammar "	111	235
Music Department and Conservatory of Music		123
Summer Class		55
		932
Counted twice		61
Total		871

This shows an increase in numbers over last year in the Normal Department of 45 and in the Training School of 77. The increase would have been much larger but for the fact that during the autumn and winter there was great depression in business, and large numbers of students who had signified their intention to attend were forced to suspend their efforts to fit themselves for teachers till better times. The times have somewhat improved, and the prospect is very flattering for a much larger increase next year. As it is, the Michigan State Normal School stands almost alone in its increase during the past year, most of the educational institutions showing a considerable falling off for the reasons above given.

At the Commencement, June 24, 1885, there were 97 graduates; 55 in the three year (English) course, and 42 in the four year (Classical, Scientific, Modern Language, Literary and Music) courses. The following is the list of the persons so graduating, with the course and residence of each:

GRADUATING CLASS.

Third Year—English Course.

Aldrich, Frank T., Pittsford.
Aldrich, Edessa, Eng., Lat., Saline.
Ball, Kate, Hamburg.
Ballard, Walter W., Ypsilanti.
Barrett, John E., North Branch.
Bell, Robert W., Elsie Craig, Ont.
Bolton, Clara, Detroit.
Cooke, T. Dale, Flat Rock.
Cox, Lucy May, Harbor Springs.
Cross, Kittie, Ypsilanti.
Crawford, Lillian, Ypsilanti.
Dodge, Rettie, Ypsilanti.
Dolan, Mrs. Mary, Wayne.
Emery, Lottie M., Romulus.
Farwell, Jessie, Clifton.
Fenton, Kate M., Ypsilanti.
Ferguson, Eva, Mindon.
Forger, Jennie A., West Bay City.
Goodell, Geo. M., Ypsilanti.
Gardiner, Stella M., Bay City.
Green, Maud B., Walled Lake.
Harper, Nellie, Milford.
Hayden, Holland N., East Springport.
Jones, Sarah E., Hancock.
Kilbourne, Mary L., Lansing.
Kelly, Ella, Metamora.
Knight, Dora, Schoolcraft.
Loughnane, Emma, Lapeer.
Lambie, Isabella, Ypsilanti.
Mickens, Charles W., Lambertville.
Marsh, Jennie D., Mackinaw City.
Mullen, Frank E., Cleonidas.
Miller, Florence, Belleville.
McElheny, Bertha, Lawton.
Murphy, Nora, Ypsilanti.
Murray, Ellen B., Ypsilanti.
*Nichols, Emma L., Bronson.
Purchase, George H., Chelsea.
Rowe, Elisha, Ypsilanti.
Sleeth, Ada, Ypsilanti.
Sweezey, George B., Wheatland.
Saur, Albert, Kent City.
Steward, William G., Wyandotte.
Stilson, Minnie B., Ypsilanti.
Skinner, Clara E., Newaygo.
Savigny, Katie, Almont.
Taylor, Fannie M., Ann Arbor.
Trenbath, Mary E., Lake Linden.
Utter, Mary, Birmingham.
Visscher, Mary, Holland.
Wood, Stanley O., Commerce.
Wells, Leroy V., Wyandotte.
Wilcox, Kittie, Almont.
Wilbur, Eloise M., Farmington.
Woodard, Luther B., Hubbardston.

Fourth Year.

Biscombe, Joseph, Sci., Hancock.
Benton, Howard, Sci., Plymouth.
Boyd, Hattie I., M. L., St. Johns.
Buell, Viola, Lat. Sci., Richland.
Benjamin, Henry P., Lat. Ger., Zeeland.
Crittenden, Eloise, Sp. Mu., Augusta.
Dennison, Geo. A., Lat. G., Ypsilanti.
DeWitt, Alton, Lit. Lat., Flint.
Ebling, Elva E., M. L., Ypsilanti.
Ferguson, Edgar E., Sci., Ypsilanti.
Freeman, Edwin J., Lit., Middleville.
George, Lucy, Lit., Ypsilanti.
Gardner, Eugene M., Sci., Ypsilanti.
Hodge, Annie L., Lit., Newburyport, Mass.
Hazard, Jesse M., Sci., Fulton.
Hinkley, Francis, Sci., Benton Harbor.
Haskins, Edna, Sci. F., Bronson.
Harris, James, M. L., Hancock.
Hunter, Abbie, Sp. Mu., Kalamazoo.
Hale, Amelia, Sci. Ger., Williamston.
Kenyon, Elmer A., Lat. Gr., Parma.
Kelly, Anna M., Lat. Fr., Jackson.
Kedzie, Libbie M., Lit., Deerfield.
King, Harry E., Lit., Coldwater.
Lodeman, Ernest G., M. L., Ypsilanti.
Miller, Owen L., Cl., Plymouth.
McDonald, Pollock J., Cl., Southfield.
Miller, Andrew, Sci., Flat Rock.
Murphy, Maggie, M. L., Ypsilanti.
Murphy, Ellen, Lit., Ypsilanti.
Osband, William W., Sci., Ypsilanti.
Pinney, Kate M., M. L., North Hudson.
Porter, Nellie, Lit. Fr., Grand Rapids.
Rogers, Ella, Cl., L. P. Ronde.
Remington, Blanche, Lit., Ypsilanti.
Race, U. Grant, Sci., Birmingham.
Straight, Sarah E., Sci., Coldwater.
Schall, Henry A., Lat. Sci., Moore Park.
Taft, Burton J., Lat. Ger., Davis.
Tedman Arthur S., Cl., Davisburg.
Wallace, Maggie, M. L., Grindstone City.
Yerkes, George B., Sci., Northville.

---

*Deceased.

The commencement exercises were largely attended and were interesting and satisfactory in every respect. The following is the program of the exercises:

PROGRAM.

Music.

PRAYER.

Music.

The Microscope	Eugene M. Gardner, Ypsilanti
Language Without Words	Sarah E. Straight, Coldwater
Goodness a Reproductive Power	George M. Goodell, Ypsilanti

Music.

Behold a Little Cloud	Maggie Murphy, Ypsilanti
Unjust Social Discrimination	Will W. Osband, Ypsilanti
The Knickerbockers	Mary Vischer, Holland

Music.

Preparation a Necessary Element of Success	Ulysses G. Race, Birmingham
A Neglected Art	Stella M. Gardner, Bay City

Music.

The Conditions of Permanence	George B. Yerkes, Northville
Our Profession	Bertha McElhenny, Lawton

Music.

THE LIBRARY.

The Library has been well conducted under the plan and supervision given in the last report, and is one of the strongest factors in the institution. It is gratifying in the extreme to see the avidity with which it is patronized by the students. The character of the work done in the Normal School, calls for a large amount of original research in History, Philosophy, and Science, and the enthusiasm with which the students respond to the call, well justifies the continual enlargement of facilities, both as to books and room. The library and reading room are entirely inadequate to the demands upon them. It is to be hoped that provision may be made in the near future for more ample accommodations.

THE MUSEUM.

For the first time in years the needs of the museum have met with a reasonable response, and the prospect is very flattering for a suitable exhibit of what is necessary to illustrate the studies in natural history and cognate branches. The amount that can be set apart from the appropriations for the current two years will not suffice to place the museum where it ought to be for an institution of the importance of this, and I most respectfully urge a continued appropriation for its increase, and to give it a standard value.

THE "PROFESSIONAL" WORK.

It is manifest to all observers that a decided advance has been made in the professional, as distinguished from the academic, work of the school. Perhaps the theory of the work has not been changed, so much as the practice. The training school has been more exacting, systematic and positive. The students have been made to see more clearly that the "professional work" was the culmination of the labors and acquirements of the school; that but for that, the school had no legitimate right to exist. Teachers and students have loyally held this in view, and under this impulse there has been marked progress. The change of the training school from the forenoon to the afternoon was of marked benefit, in that the seniors, to whom the instruction is assigned, have been able to give an undivided attention to the subject of practical teaching, without the distraction of their own recitations during intervening hours. It is manifest that still further improvements may be attained if the last year shall be wholly devoted to professional work, or if the academic work shall be more largely excluded from the labors of the last year, leaving, if any at all, only those studies which relate to facility in imparting knowledge as distinguished from acquiring it. The study of mental processes, skill in lucid expression, facility in illustration, self possession, self reliance, should be the chief work of the last year besides the practice in the training school.

The work of the school in all its departments deserves high commendation. All the teachers have labored hard, with zeal and with success. The only disability that has been encountered is the excessively large classes. Some of them have been so large that it was utterly impossible to give to each student that personal attention that accomplishes the best results. It is true that there is some compensation in the enthusiasm of numbers, but there remains the fact that a large percentage of students cannot surmount difficulties by the eclat of the class room, but need the helping hand of the teacher. The maximum number in the mathematical classes at the Naval Academy at Annapolis is ten. Experience there has demonstrated that thorough results cannot be obtained with a larger number. How manifest that the best results cannot be secured in a class of fifty to seventy-five! The Legislature at its last session in a degree realized this disability, and in a measure provided for an increase in assistants, but only in a small measure, as the increase in teaching force was hardly equal to the increase, present and prospective, of students. This naturally leads to a discussion of

THE NEEDS

of the Normal School. Last year I strongly urged an enlargement of the main school building. I repeat the suggestions of my last report, and most emphatically urge its adoption. In almost every respect the present accommodations are entirely inadequate. Study halls cannot be dispensed with, and more and larger ones are needed. Larger quarters are requisite for the library, as heretofore stated. More recitation rooms are required. At least one large lecture room to accommodate 150 students is absolutely essential, which shall be a fair medium between the chapel which seats with ordinary desks about 600, and the largest recitation room that will accommodate about 75. During the last term I had a class of 135 in Political Economy, in a room that was packed with settees and chairs, without facilities to take notes of the lectures, and so crowded as to be stifling; and other classes of 100 or more, notably in History, had to be held in one of the study halls, to the inconvenience, distraction and demoralization of the students occupying it. I would wish to be emphatic enough to satisfy the most sceptical of the earnestness I feel on this subject.

It was urged at the last session of the Legislature that probably the school had reached its maximum, and that the proposed addition could be dispensed with. But every assurance indicates a much larger attendance in the future, with increasing demands for room. I have studied the subject thoroughly, and I am satisfied that as I stated in my last report, inside of three years from that time there can be placed in the Normal School proper, 800 students. There is a constituency to furnish them, without in any way trenching upon the other institutions of the State. The field is special, and the harvest is abundant. In a sense the Normal School is the one general one for both sexes, nearest the people, in the State. It takes its students direct from the district school and equips them with a substantial education and speedily fits them for one of the noblest and most beneficial vocations in life. I speak of both sexes; for while it has relatively a arger line of gentlemen students than usually obtain in Normal schools, a considerable majority are ladies. The proportion between the sexes is about the proportion to fill the demands of the State for teachers. It is a school that the ladies desiring to teach will more readily attend than any other. In behalf, then, of the young women of the State, if not for the young men, I urge greater facilities for them. While all of our institutions are open to ladies, in nearly all others the large majority are men. In this institution there are enough young men with bright and energetic intellects to give the virility so essential for a good school; but not so many as to dominate. For this reason young women generally prefer the Normal School to any other.

It may be urged that 800 students is too large a number for successful work. I do not believe it, if there is a teaching force that shall properly size the classes. There is enthusiasm in numbers in an institution, which shall add to zeal and earnest effort, outside of the class room, and whose influence will be felt, though will not control or demoralize within. The Normal School with proper accommodations can handle 800 students at a cost not exceeding 25 per cent. more than 400, and do it equally well. Hence I conclude that it is wisdom to add these facilities; it is economy; it is justice to the young men and women who have the right to expect that their advantages shall grow with their increase in numbers.

Gentlemen: This closes my duties as Principal of the Michigan State Normal School. I am called to another line of work. I do not need to say that I do so with regret. For two years I have been associated with you and the Faculty of this institution in a work that has had my whole heart, and enlisted all my energies. To you who have so generously aided me and had confidence in me, I can but express my heartfelt thanks, and to the corps of instructors who have so harmoniously co-operated with me in our common work, more than formal thanks are due. I cannot close without noticing the bountiful aid the Legislature has granted during the time I have been connected with the institution. It has sought fully and liberally to meet the current wants of the school, and has only failed in anticipating the demands of its growth. At no time has there been a disposition to cripple it, and I have no doubt that in the future it will stand by the institution which has been so heartily fostered by the State. It is worthy of generous support. I believe in the efficiency of the Normal School plan, and I most thoroughly believe in the Michigan Normal School. It deservedly stands high among the institutions of its kind, and is worthy of continued confidence. You may command me, heart and voice, at any time in its commendation.

I have the honor to present the following exhibits, which more fully comply with the law and furnish information relating to the Normal School.

EDWIN WILLITS,
Principal.

NORMAL SCHOOL,
Ypsilanti, June 30, 1885.

EXHIBIT A.

COURSES OF INSTRUCTION.

SCIENTIFIC COURSE.

First Year.

First Term—1. Arithmetic. 2. Grammar and Composition. 3. Reading and Orthography. 4. Vocal Music.

Second Term—1. Algebra. 2. Local, Mathematical and Physical Geography. 3. Botany. 4. Object Drawing.

Second Year.

First Term—1. Algebra. 2. History of the United States. 3. Rhetoric. 4. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. Essays.

Second Term—1. Geometry. 2. English Literature. 3. Elementary Physics. 4. Penmanship, 10 weeks; Zoölogy, 10 weeks. Essays.

Third Year.

First Term—1. Geometry. 2. Comparative Zoölogy and Physiology, 10 weeks; Civil Government, 10 weeks. 3. General History. 4. Mental and Moral Science, and their Application to Teaching. Essays.

Second Term—1. Higher Algebra. 2. Drawing. 3. Professional Training in Arithmetic, 10 weeks; Book-keeping, 10 weeks. 4. School Organization, Government, etc. Essays.

Fourth Year.

First Term—1. Chemistry. 2. Higher Physics. 3. Geology, 10 weeks; History of Education, etc., 10 weeks. 4. Practice Teaching; Professional work in Common Branches. Essays.

Second Term—1. Chemistry, 10 weeks; Astronomy, 10 weeks. 2. Trigonometry and Surveying. 3. Political Science, 10 weeks; Training in Physical Science, 10 weeks. 4. Practice Teaching and Professional Work in Common Branches. Essays.

LITERARY COURSE.

First Year.

First Term—1. Arithmetic. 2. Grammar and Composition. 3. Reading and Orthography. 4. Vocal Music.

Second Term—1. Algebra. 2. Local, Mathematical and Physical Geography. 3. Botany. 4. Object Drawing.

Second Year.

First Term—1. Algebra. 2. History of the United States. 3. Rhetoric. 4. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. Essays.

Second Term—1. Geometry. 2. English Literature. 3. Elementary Physics. 4. Penmanship, 10 weeks; Zoölogy, 10 weeks. Essays.

Third Year.

First Term—1. Geometry. 2. English Literature, 10 weeks; Civil Government, 10 weeks. 3. General History. 4. Mental and Moral Science, and their Application to Teaching. Essays.

Second Term—1. English History. 2. American Literature. 3. Professional Training in Arithmetic, 10 weeks; History of Education, etc., 10 weeks. 4. School Organization, Government, etc. Essays.

Fourth Year.

First Term—1. Chemistry. 2. General Literature. 3. Grecian and Roman History. 4. Practice Teaching; Professional Work in Common Branches. Essays.

Second Term—1. American History. 2. Advanced Rhetoric, etc. 3. Political Science, 10 weeks; Training in Physical Sciences, 10 weeks. 4. Practice Teaching and Professional Work in Common Branches. Essays.

LANGUAGE COURSE.

First Year.

First Term—1. Latin or German. 2. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. 3. Arithmetic. 4. Vocal Music.

Second Term—1. Latin or German. 2. Algebra. 3. History of the United States. 4. Penmanship, 10 weeks; Reading and Orthography, 10 weeks.

Second Year.

First Term—1. Latin or German. 2. Greek or French. 3. Algebra. 4. Rhetoric. Essays.

Second Term—1. Latin or German. 2. Greek or French. 3. Geometry. 4. Elementary Physics. Essays.

Third Year.

First Term—1. Latin or German. 2. Greek or French. 3. Geometry. 4. Mental and Moral Science, and their Application to Teaching. Essays.

Second Term—1. Latin or German. 2. Greek or French. 3. Professional Training in Arithmetic, 10 weeks; Civil Government, 10 weeks. 4. School Organization, Government, etc. Essays.

Fourth Year.

First Term—1. Latin or German. 2. Greek or French. 3. Chemistry. 4. Practice Teaching; Professional Work in Common Branches. Essays.

Second Term—1. Latin or German. 2. Greek or French. 3. Political Science, 10 weeks; Training in Physical Science, 10 weeks, three lessons a week; History of Education, 10 weeks, two lessons a week. 4. Practice Teaching; Professional Work in Common Branches. Essays.

ENGLISH COURSE.

First Year.

First Term—1. Algebra. 2. Grammar and Composition. 3. Local, Mathematical and Physical Geography. 4. Object Drawing.

Second Term—1. Algebra. 2. Grammar and Composition. 3. Arithmetic. 4. History of the United States.

Second Year.

First Term—1. Algebra. 2. Penmanship, 10 weeks; Reading and Orthography, 10 weeks. 3. Rhetoric. 4. Physiology and Hygiene, 15 weeks; Narcotics, 5 weeks. Essays.

Second Term—1. Geometry. 2. Vocal Music. 3. Elementary Physics. 4. Literary Reading, 10 weeks; Civil Government, 10 weeks. Essays.

Third Year.

First Term—1. Chemistry or Botany. 2. General History. 3. Mental and Moral Science, and their Application to Teaching. 4. Practice Teaching; Professional Work in Common Branches. Essays.

Second Term—1. Political Science, 10 weeks; Laboratory Practice, 10 weeks. 2. School Organization, Government, etc. 3. Professional Training in Arithmetic, 10 weeks; History of Education, 10 weeks, two lessons a week. 4. Practice Teaching; Professional Work in the Common Branches. Essays.

SPECIAL COURSE WITH MUSIC.

First Year.

Any of the other courses which the student may select with the approval of the Principal.

Second Year.

First Term—1. Elements of Vocal Music with Methods of Instruction. 2. Algebra. 3. Rhetoric. 4. German, French or Latin. Essays. Instrumental Music may be substituted for 2, 3 or 4.

Second Term—1. Advanced Vocal Music and Voice Culture. 2. Elementary Physics. 3. English Literature. 4. German, French or Latin. Essays. Instrumental Music may be substituted for 2, 3 or 4.

Third Year.

First Term—1. Harmony. 2. Voice Culture. 3. Mental and Moral Science and their application to Teaching. 4. German, French or Latin. Essays. Instrumental Music may be substituted for 4.

Second Term—1. Harmony. 2. Voice Culture. 3. School Organization, Government, etc. 4. German, French or Latin. Essays. Instrumental Music may be substituted for 4.

Fourth Year.

First Term—1. Musical Composition and Literature of Music. 2. Solo Singing. 3. Language of Literature. 4. Practice Teaching; Professional Work in Common Branches. Essays. Instrumental Music may be substituted for 3.

Second Term—1. Solo Singing. 2. Literature. 3. Professional Training in Arithmetic, 10 weeks; History of Education, 10 weeks, two lessons a week. 4. Practice Teaching; Professional Work in the Common Branches. Essays. Instrumental Music may be substituted for 2.

SPECIAL COURSES.

Latin, Greek, German or French may be substituted in the Scientific Course as follows:

First Year—In place of any subject in which the student shall pass a satisfactory examination.

Second Year—First Term, in place of General History of the third year. Second Term, in place of English Literature.

Third Year –First Term, in place of Comparative Zoölogy and Book-keeping. Second Term, in place of Higher Algebra.

Fourth Year—First Term, in place of Higher Physics. Second Term, in place of Surveying and 10 weeks of Chemistry.

And in the Literary Course as follows:

First Year—In place of any subject in which the student shall pass a satisfactory examination.

Second Year—First Term, in place of General History of the third year. Second Term, in place of English Literature, 10 weeks, and Zoölogy, 10 weeks.

Third Year—First Term, in place of Grecian and Roman History of the fourth year. Second Term, in place of American Literature. In this case, General History will take the place of English History.

Fourth Year—First Term, in place of General Literature. Second Term, in place of Advanced Rhetoric. In this case, English History will take the place of American History.

NOTE.—When the substitution is in the Scientific or Literary Course, the course is denominated "Scientific (or Literary) with Latin (or Greek, or German, or French) Substitution," as the case may be. There may be a substituted course in the languages of two years, and in such case the course is called "Scientific (or Literary) with Shorter Latin (or Greek, or German, or French)" as the case may be. The full or the two years' Language Course may be ADDED to the English Course, in which case it is called the "English with Full (or Shorter) Latin (or Greek, or German, or French,)" as the case may be.

MODERN LANGUAGES.

COURSE IN GERMAN.

First Year.

First Term—Pronunciation, reading, and conversation. A rudimentary knowledge of the various parts of speech; the most necessary rules of syntax. (Buchheim's German Reader. Brandt's Grammar, with Lodeman's Manual of Exercises.)

Second Term—Reading, conversation, and grammatical exercises continued. Later: Lessing's *Minna von Barnhelm.* (Brandt's Grammar and Lodeman's Manual.)

Second Year.

First Term—Goethe's *Hermann und Dorothea.* Conversation and grammatical exercises continued. (Brandt's Grammar and Lodeman's Manual.)

Second Term—Gutzkow's *Zopf und Schwert.* Schiller's *Wilhelm Tell.* Some short story by P. Heyse.

Third Year.

First Term—Heine's *Prosa* (Macmillan's Edition). Goethe's *Egmont.* Written exercises and conversation.

Second Term—Buchheim's *Deutsche Lyrik.* Outlines of German Literature.

Fourth Year.

(Every other day.)

First Term—Goethe's *Iphigenie auf Tauris.* Some German work on Education. Review of difficult topics in the grammar.

Second Term—Lessing's *Nathan der Weise.* Short stories by Lindau, Heyse, or some other modern writer. Methods of teaching living languages. Practice teaching and observation.

COURSE IN FRENCH.

First Year.

First Term—Pronunciation and reading. (Macmillan's Progressive French Course, Part I.; Part II. commenced.)

Second Term—Reading and conversation. (Macmillan's Course, Part II. completed.) Mmd. de Girardin: *La Joie fait Peur.* Scribe & Legouve: *La Bataille de Dames.*

Second Year.

First Term—Halevy: *L'Abbe Constantin.* Sandeau: *Mlle. de la Seigliere.* G. Sand: *La Mare au Diable.* Study of Idioms and conversation in connection with the reading.

Second Term—Systematic French Grammar and Lessons in Composition. (Macmillan's Course, Part III.) Corneille: *Le Cid.* Molliere: *Le Misanthrope.*

Third Year.

(Every other day.)

First Term—Lacombe: *Petite Histoire du Peuple Francais,* (in French only, with practice in conversation); or *Tableau de la Revolution Francaise,* by Crane & Brun (Putnam.) Victor Hugo: *Hernani.* Racine: *Athalie.*

Second Term—Legouve: *La Lecture en Action;* or some French work on Education. French letters and essays. Methods of teaching living languages. Practice teaching and observation.

EXHIBIT B.

TEXT AND REFERENCE BOOKS.

English Grammar and Composition—*Swinton.*
English and American Literature—*Shaw, Royse.*
United States History—*Bush's Berard, Eliot, Ridpath.*
General History—*Anderson's Series.*
Zoölogy—*Tenney, Orton, Packard.*
Botany—*Wood, Gray, Bessey.*
Geology—*Dana, Winchell.*
Physiology—*Brown, Hutchinson.*
Book-keeping—*Williams and Rogers.*
Elementary Algebra—*Bellows.*
Higher Algebra—*Olney.*
Arithmetic (methods)—*Bellows.*
Geometry—*Bellows.*
Trigonometry—*Bellows.*
Rhetoric—*D. J. Hill.*
Elementary Physics—*Gage.*
Higher Physics—*Gillet and Rolfe.*
Chemistry—*Youmans, Barker.*
Astronomy—*Newcomb and Holden.*
Latin Grammar—*Allen and Greenough.*
Latin Reader—*Allen and Greenough.*
Cæsar—*Allen and Greenough.*
Cicero—*Allen and Greenough.*
Virgil—*Allen and Greenough or Frieze.*
Horace—*Lincoln.*
Greek Grammar—*Goodwin and Hadley.*
First Greek Book—*White.*
Anabasis—*Goodwin.*

Sketches from Historians—*Boise and Freeman.*
Iliad—*Boise.*
History of Greece—*Smith.*
Science and Art of Teaching—*Putnam.*
Mental Science—*Hamilton, Haven.*
Moral Science—*Lectures.*

Books used in the Department of Modern Languages are indicated in the description of the courses in that Department.

TEXT BOOKS USED IN PRACTICE SCHOOL.

Arithmetic—*Bellows, Olney.*
Language—*Swinton, Reed and Kellogg.*
Readers—*Modern School.*
Geography—*Appleton, Our World.*
United States History—*Higginson, Swinton.*
Penmanship—*Spencerian.*
Dictionary—*Webster.*
Other books are used when desirable.

EXHIBIT C.

STATISTICS OF TEACHING.

1.	Number of graduates in the full courses from the State Normal School from 1870 to 1880, inclusive	294
2.	Number of those who are known to have engaged in teaching	270
3.	Number from whom no report has been obtained	10
4.	Number known not to have engaged in teaching	14
5.	Per cent. known to have engaged in teaching	92
6.	Average length of time taught, on the basis of the whole number of graduates	5 years.
7.	Average length of time taught, on the basis of the number engaged in teaching	5.5 years.
8.	Number of male graduates	126
9.	Number of males known to have engaged in teaching	113
10.	Number of males from whom no report has been obtained	2
11.	Number of males known not to have engaged in teaching	11
12.	Per cent. of males known to have engaged in teaching	89
13.	Average time taught, on the basis of the whole number of male graduates	5 years.
14.	Average time taught, on the basis of the whole number of male graduates who engaged in teaching	5.6 years.
15.	Number of female graduates	168
16.	Number of females known to have engaged in teaching	157
17.	Number of females from whom no report has been received	8
18.	Number of females known not to have engaged in teaching	3
19.	Per cent. of females known to have engaged in teaching	93
20.	Average time taught, on the basis of the whole number of female graduates	5 years.
21.	Average time taught, on the basis of the number of female graduates who have engaged in teaching	5.4 years.
22.	Number of male graduates known to have died	8
23.	Number of female graduates known to have died	4

24.	Total time that could have been taught if all these graduates had been teaching from the date of their graduation to the present time; i. e., if all had at once gone to teaching, if none had died, stopped for a season, or abandoned the profession	3,380	years.
25.	Males could have taught	1,246	"
26.	Females could have taught	1,334	"
27.	Time actually taught by these graduates	1,488	"
28.	Time actually taught by male graduates	639	"
29.	Time actually taught by female graduates	849	"
30.	Per cent. of actuality to possibility on the basis of the whole number of these graduates		62
31.	Per cent. of actuality to possibility on basis of male graduates		61
32.	Per cent. of actuality to possibility on basis of female graduates		63.6

STUDENTS.

Post Graduates.

Name.	Course.	Residence.
Bassett, Mollie	French Music	Ypsilanti.
Ball, Jule	Literary	Hamburg.
Cornish, George W.	German Music	Lawton.
McFetridge, George H.		Ida.
St. John, Charles E.	Chemistry	Reading.

SUMMARY.

Normal Department		520
Training School,		
Primary Department	124	
Grammar	111	
		235
Music Department and Conservatory of Music		122
Summer Class		55
Aggregate		932
Counted twice		61
TOTAL		871

B.

REPORT OF BOARD OF VISITORS FOR 1884-5.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—The undersigned, visitors of the State Normal School for the year 1885, respectfully report that we have given such time and attention as we have been able in the discharge of our official duty during the year, and have endeavored to inform ourselves as thoroughly as under the circumstances we could, of the condition and wants of the institution. With this end in view we have spent several days each in attendance at the ordinary sessions of the school and at the commencement exercises.

The result of our observations we can state but briefly in this report. The general appearance of the grounds and buildings is very attractive. The grounds are well kept, the buildings in good repair, and everything is neat and tidy.

The discipline of the school, so far as we have been able to judge, is well administered.

The gathering of the students in the morning to their daily tasks, and the shifting of the classes from room to room in the intervals between the recitations to the sound of music, but with not too great precison, was a pleasing and interesting sight.

A visit or two to each of the recitation rooms showed us the school at work. In all the various departments we found active inquiry and very creditable work, both by pupils and by teachers. The spirit of the school is excellent. While we could not resist the impression that too great a portion of the energy and time of both faculty and pupils is devoted to academic rather than professional training, yet the professional tone was very apparent and commendable throughout the whole. The real object of the school seems to be kept well in mind, and we were led to hope that in the near future a greater portion of the necessary academic work may be done without the walls of the Normal School, so that more time than at present may be given to more strictly professional training.

One of the great wants of the school is more room and greater facilities for practice teaching. A more extended course in civil government, and greater attention to all the subsidiary branches which aid the teacher, with comparative study of the various systems of education of different States and nations would seem to us to come fairly within the necessary scope of professional training. And especially do we believe that these incipient teachers, who, in the near future, are to make, regulate, and control—in a large measure—the curriculum of the graded schools of the State, should be thoroughly impressed with the fact that it is possible to crowd so many branches into this curriculum as to make their study necessarily superficial—too much cramming, too little assimilation. This possibility we believe has become a reality in this State. "A few things well done are better than many things half done" applies as well in the public schools as in the other affairs of life.

The geological and botanical museum, which we understand is of very recent growth, is very creditable in its appearance, but has need of large additions, and we believe that considerable money could be expended in this direction with great profit.

The library and reading rooms are very respectable in size and general appearance, and we were pleased to find them so generally used.

On the whole, we have been more impressed than ever before with the importance of this institution as a factor in the educational machinery of the State.

The common schools are the colleges of the people. In them the great majority of the children of the State receive the substance of their education. What kind of work they are required to do, and what grade of character is exhibited before them in the persons of their teachers, are matters of the greatest import, not to themselves and their friends alone, but to the State. It is the duty of their teachers not only to give instruction in the required branches of the schools, but to aid in building the character of those under their charge by proper instruction in morals and good citizenship. To furnish these teachers, properly prepared in learning, in character, and in ability to give instruction is the office of the Normal School. To what extent it is successful in this regard must be chiefly determined by the course and character of the students after graduation. We observed, however, both in the recitations to which we listened and in the essays and orations in class and on commencement day, a maturity of thought and a spirit of respectful inquiry which argued to us that the efforts and examples of teachers had not been wasted.

O. A. CRITCHETT,
JOHN MOORE,
Visitors.

C.

FINANCIAL EXHIBIT FOR 1884-5.

STATE BOARD OF EDUCATION IN ACCT. WITH EDGAR REXFORD, TREASURER.

To Whom Paid.			Amount.
Edwin Willits	9	Months	$3,150 00
Daniel Putnam	10	"	2,100 00
Lewis McLouth	9	"	1,800 00
Theodore Nelson	9	"	1,800 00
F. H. Pease	10	"	2,000 00
C. F. R. Bellows	10	"	2,000 00
A. Lodeman	10	"	2,000 00
J. P. Vroman	10	"	2,000 00
Austin George	10	"	2,000 00
E. A. Strong	1	"	200 00
F. A. Barbour	1	"	200 00
John Goodison	1	"	100 00
William H. Brooks	10	"	730 00
Henry T. Coe	10	"	530 00
Charles E. St. John	1	"	40 00
Willis W. Weeks	1	"	40 00
Julia A. King	10	"	1,320 00
Lucy A. Osband	10	"	$820 00
Helen M. Post	10	"	700 00
Fanny E. Goffe	9	"	630 00
Lois A. McMahon	10	"	700 00
Ann J. Bignell	9	"	630 00
Ency J. Coleman	9	"	630 00
Rose V. Barton	1	"	45 00
Anna A. Paton	9	"	430 00
Florence B. Kinnie	9	"	360 00
Florence Goodison	10	"	400 00
Abbie Pearce	1	"	70 00
Amelia Hale	1	"	35 00
Ellen H. Murphy	1	"	35 00
Assistant Teachers	10	"	225 00
C. C. Vroman	12	"	1,000 00
			$28,720 00

Current Expense Account.

1884.		No. of Voucher.	To Whom Paid.	Amount.
Sept.	17	1	Samuel Mathewson, publishing notice of school	$5 00
	17	2	Edgar Rexford, treasurer, for year ending June 30, 1884	300 00
Oct.	22	3	Edwin Willits, paid for matting	27 73
	22	4	Tel. & Tel. Const. Co., use of telephone	24 00
	22	5	A. Lodeman, expenses to Detroit, express, etc.	3 05
	22	6	Detroit Electrical Works, electrical gongs, etc.	20 85
	22	7	H. D. Edwards & Co., stair-tread rubber	34 92
	22	8	Thorndike Nourse, class registers	6 44
	22	9	Walter Hewitt, tuning piano	10 00
	22	10	Frank Smith, rubber bands, chemicals, stationery, etc., etc.	15 55
	31	11	Pay roll (shown in salary account)	2,808 33
Nov.	6	12	J. Phillips & Co., case for museum	8 67
	6	13	Edwin Willits, expenses to Detroit, paid for cleaning building, etc., etc.	47 05
	6	14	Seward Albright, freight and cartage	1 07

1884.		No. of Voucher.	To Whom Paid.	Amount.
Nov.	6	15	L. E. Childs, compost, plants, etc.	$18 05
	6	16	American Express Co., express	25
	6	17	Lucy A. Osband, specimens from Iowa and freight	5 00
	6	18	Lewis McLouth, paid for repairing air pump	4 25
	30	19	Pay roll (shown in salary account)	2,808 33
Dec.	23	20	Mary A. Stewart, teaching 11 weeks (shown in salary account)	33 00
	23	21	Hattie A. Bray, teaching 11 weeks (shown in salary account)	33 00
	23	22	American Express Co., express	3 45
	23	23	Homer Briggs, freight and cartage	7 81
	31	24	Pay roll (shown in salary account)	2,808 34
	23	25	Michigan School Furniture Co., table for museum	5 50
	23	26	Walter Hewitt, tuning piano	3 00
	23	27	Drury & Taylor, hardware	50
	23	28	W. C. Stevens, hardware	18 60
	23	29	Cassey & Whitney, photographs for New Orleans Exposition	9 00
	23	30	Wallace & Clark, curtain goods and curtain fixtures	24 97
	23	31	Frank Smith, chemicals, stationery, etc., etc.	30 77
	23	32	Ypsilanti Postoffice, postal cards and stamps	25 80
1885.				
Jan.	31	33	Pay roll (shown in salary account)	2,808 33
Feb.	28	34	Pay roll (shown in salary account)	2,808 33
Mar.	26	35	American Express Co., express	25
	26	36	Tel. & Tel. Const. Co., use of telephone	24 00
	26	37	John Bibb, cleaning outhouses	10 00
	26	38	E. W. Bowen, one doz. brooms	3 30
	26	39	J. E. Bassett, paint and painting	3 85
	26	40	J. W. Bowen, repairing steam pipes	3 50
	26	41	Austin George, 3 table tops, etc.	6 00
	26	42	Hattie A. Bray, teaching 5 weeks (shown in salary account)	15 00
	26	43	Vincent Loomis, repairing organ	6 00
	26	44	M. Shoemaker, member of visiting committee	12 50
	26	45	Parsons Bros., labor and material in building wardrobes	34 86
	26	46	Walter Hewitt, tuning piano	5 00
	26	47	O. A. Critchett, member of visiting committee	7 90
	26	48	Hattie A. Bray, teaching 8 weeks (shown in salary account)	24 00
	26	49	John Moore, member of visiting committee	11 85
	31	50	Pay roll (shown in salary account)	2,808 34
	26	51	Lucy A. Osband, museum expenses	3 42
	26	52	Detroit Metal & Heating Works, one set grate bars	27 62
	26	53	A. Harvy & Son, centre grates and gauge glasses	5 50
	26	54	Chas. E. Samson, moving piano and use of same	5 00
	26	55	Ypsilanti Gas Light Co., 75,800 feet of gas	193 65
	26	56	J. H. Sampson, one door and one night latch	2 00
	26	57	E. Samson, glass, etc., etc.	8 53
May	28	58	American Express Co., express	25
	28	59	Penn. Coal Co., 24.1391-2000 tons coal	128 99
	28	60	Estate of E. Wilson, hauling coal	10 52
	28	61	Amelia Hale, teaching 6 weeks (shown in salary account)	18 00
	28	62	L. McLouth, work in museum	26 10
	28	63	Charles E. St. John, expenses to Lansing	6 00
	28	64	Normal News, publishing advertisements	50 00
	28	65	Theodore Nelson, expenses to Lansing	15 50
	28	66	Ypsilanti Broom Co., 1.1-6 doz. brooms	3 50
	28	67	Pay roll (shown in salary account)	2,868 33
	31	68	Pay roll (shown in salary account)	2,868 33
	28	69	George W. Hough, pens, pencils, crayon, etc., etc.	25 70
	28	70	John Bibb, hauling compost, rolling grounds, etc.	21 00

1884.		No. of Voucher.	To Whom Paid.	Amount.
May	28	71	Wm. Linderman, work in copying	$9 37
	28	72	Alexander Bailey, extra allowance as janitor	12 00
	28	73	Lucy A. Osband, specimens for museum	3 60
	28	74	M. T. Woodruff, printing, etc., etc.	9 00
	58	75	McElcheran & McAndrew, 1 chair and repairing locks	10 25
	28	76	Thorndike Nourse, class registers	2 62
	28	77	Frederick E. Brandis, 1 spirit level	15 00
	28	78	Ypsilanti Gas Co., 76,200 feet gas	152 40
	28	79	Eberbach & Son, chemicals	14 27
	28	80	Eberbach & Son, chemicals	13 79
	28	81	Eberbach & Son, varnish brush, bottles, etc.	2 70
	28	82	Eberbach & Son, chemicals	21 90
	28	83	Eberbach & Son, chemicals	27 42
	28	84	Eberbach & Son, chemicals	15 35
	28	85	Eberbach & Son, chemicals	33 45
	28	86	C. W. Rogers, picture frame and glass	4 00
	28	87	George Olp & Co., use of hack for legislative committee	5 00
June	24	88	American Express Co., express	2 95
	24	89	E. P. Allen, expenses to Lansing	22 30
	24	90	William Kersey, work on grounds	37 57
	24	91	Tel. & Tel. Const. Co., use of telephone	24 00
	24	92	Amelia Hale, teaching 5 weeks (shown in salary account)	15 00
	24	93	Hattie A. Bray, teaching 11 weeks (shown in salary account)	33 00
	24	94	John Moore, member of visiting committee	11 40
	24	95	O. A. Critchett, member of visiting committee	8 40
	24	96	J. W. Hazard, teaching 8 weeks (shown in salary account	24 00
	24	97	Edwin Willits, paid for labor on grounds and building, etc.	152 79
	24	98	William Kersey, work on grounds	6 00
	24	99	William Pollard, work on grounds	4 50
	24	100	M. Lespronce, painting steps, etc.	3 55
	24	101	William Pollard, work on grounds	28 81
	24	102	Estate of E. Wilson, hauling ashes, etc.	12 00
	24	103	Walter Hewitt, tuning piano	5 00
	24	104	Walter Hewitt, tuning piano	5 00
	24	105	C. F. R. Bellows, square and drawing board	3 75
	24	106	C. F. R. Bellows, expenses to Lansing	11 00
	24	107	Edgar Rexford, treasurer, for year ending June 30, 1885	300 00
	24	108	A. Lodeman, pamphlet cases	3 60
	24	109	Charles E. St. John, teaching 10 weeks (shown in salary account)	30 00
	24	110	Fanny E. Goffe, filling out diplomas	24 00
	24	111	George W. Hough, ½ ream paper	1 50
	24	112	Michigan Telephone Co., telephone charges	3 30
	30	113	Pay roll (shown in salary account)	2,868 34
July	9	114	Lewis McLouth, work in museum	6 50
	9	115	American Express Co., express	55
	9	116	J. P. Vroman, telephone charges	40
	9	117	Lucy A. Osband, museum specimens and apparatus	2 80
	9	118	Henry T. Coe (shown in salary account)	100 00
	9	119	W. H. Brooks, advertisement in circular	5 00
	9	120	Smith & Powers, printing catalogues, etc.	240 50
	9	121	Frank Smith, school supplies	69 81
	9	122	George F. Key, work in copying	20 00
	9	123	Homer Briggs, moving piano	8 00
	9	124	C. R. Pattison, printing circulars, etc.	41 50
	9	125	Ypsilanti Commercial Printing Co., printing reports, etc.	21 00
	9	126	W. C. Stevens, hardware	15 56
	9	127	C. King & Son, grass seed, matches, etc.	4 46

1884.		No. of Voucher.	To Whom Paid.	Amount.
July	9	128	Ypsilanti Postoffice, postage stamps, etc	$27 55
	9	129	Comstock & Ebling, ribbons for diplomas	24 45
	9	130	Calvert Lith. & Eng. Co., diplomas, etc	92 25
	9	131	University of Michigan, balance on lights of glass	61 27
	9	132	Eberbach & Son, chemicals	16 90
	9	133	Eberbach & Son, chemicals, etc	7 45
	9	134	Chas. A. Strelinger, tools, etc	10 06
	9	135	Ypsilanti Gas Co., 36,700 feet gas	73 40
	9	136	Alexander Bailey, extra allowance as janitor	12 00
	9	137	Michigan School Furniture Co., astral lantern	15 00
	9	138	Parsons Bros., cedar hitching posts	3 00
	9	139	Ladies' Library Association, commencement dinner	175 00
Sept.	29	140	James Wilson, hauling 49 1325-2000 tons coal	19 86
	29	141	Tel. & Tel. Const. Co., use of telephone	24 00
	29	142	Homer Briggs, freight and cartage	1 43
	29	143	C. F. R. Bellows, postage stamps	6 82
	29	144	Wm. Milne, expenses from Genesee, N. Y., to Ypsilanti and return	29 60
	29	145	Estate of E. Wilson, hauling 327 1205-2000 tons coal and paid for weighing the same	138 99
	29	146	Estate of E. Wilson, cleaning outhouses	10 00
	29	147	Penn. Coal Co. 365 352-2000 tons coal	1,752 85
	29	148	Frank Bucklin, use of hack	2 50
	29	149	Parsons Bros., lumber and shingles	125 18
	29	150	Wm. Kersey, work on grounds	2 80
	29	151	E. E. Lyon, slating blackboards	100 00
	29	152	Ypsilanti Postoffice, postage stamps	10 00
	29	153	S. W. Albright, freight and cartage	84
	29	154	James Coquillard, mason work	7 78
	29	155	S. W. Albright, freight and cartage	4 21
	29	156	C. F. R. Bellows, services as secretary of faculty during vacation	100 00
	29	157	Lewis McLouth, use of horse on lawn mower	4 88
	29	158	H. B. Claflin & Co., cocoa matting	162 24
	29	159	Wm. Kersey, work on grounds	2 75
	29	160	Wm. Pollard, work on grounds	2 50
	29	161	James Smith, work on grounds	6 12
	29	162	W. W. Worden, painting and material	13 20
	29	163	Chas. Fleming, carpenter work in museum	16 90
	29	164	Chas. Fleming, work in laboratory and lumber	8 74
	29	165	Chas. Fleming, work in repairing building, etc., etc	289 57
	29	166	Homer Briggs, freight and cartage	4 71
	29	167	Homer Briggs, freight and cartage	2 51
	29	168	Ducharme, Fletcher & Co., sash weights, etc., etc	9 12
	29	169	Smith & Powers, printing circulars, etc	12 75
	29	170	D. Putnam, paid for folding and mailing circulars	7 25
	29	171	D. Putnam, expenses to Detroit	3 30
	29	172	Ypsilanti Commercial Printing Co., printing	22 50
	29	173	Follmore & Scovell, lumber and shingles	32 15
	29	174	Follmore & Scovell, lumber	13 44
	29	175	Edgar Rexford, paid Prof. A. L. Hardy's expenses, etc., etc	4 50
	29	176	Frank Smith, pencils, crayons, etc., etc	31 90
	29	177	Frank Smith, window glass and putty	13 72
	29	178	W. C. Stevens, hardware	1 78
	29	179	W. C. Stevens, wheelbarrow, etc	5 32
	29	180	W. C. Stevens, hardware	31 39
	29	181	Drury & Taylor, lead pipe and sink	1 69
	29	182	Drury & Taylor, repairing tin roof, etc	52 66
	29	183	E. Samson, window glass, putty and paint	21 18

1884.	No. of Voucher.	To Whom Paid.	Amount.
Sept. 29	184	Ypsilanti Postoffice, postage stamps	$28 41
29	185	Peninsular Paper Co., paper	56 30
29	186	Peninsular Paper Co., 47 lbs. of book paper	4 70
30	187	Pay roll (shown in salary account)	2,940 00
		Disbursements on acct. of current expenses for year ending Sept. 30th, 1885	$35,226 35

1884.	DEBIT.	
Sept. 30	Balance from old account	$306 63
1885.		
Sept. 30	Current expenses as per above statement	35,226 35
30	Balance to new account	248 74
		$35,781 72

1884.	CREDIT.	
Oct. 4	By cash from State Treasurer	$7,835 20
Dec. 31	By cash from diploma fees	21 00
31	By cash from tuition	1,140 00
31	By cash from J. Bickford	1 30
31	By cash from R. W. Hemphill	24 00
31	By cash from D. C. Batchelder	10 60
1885.		
Jan. 5	By cash from State Treasurer	7,732 37
Apr. 6	By cash from State Treasurer	1,034 00
May 12	By cash from State Treasurer	9,487 50
June 30	By cash from tuition	1,063 75
30	By cash from diploma fees	276 00
36	By cash from laboratory fees	156 00
July 10	By cash from State Treasurer	7,000 00
		$35,781 72

Special Funds Account.

STATE BOARD OF EDUCATION IN ACCT. WITH EDGAR REXFORD, TREASURER.

1884.	No. of Voucher.	To Whom Paid.	Amount.
Oct. 22	1	George W. Hough, on account of library	$45 88
22	2	Fred J. Schleede, on account of library	11 70
22	3	The Globe Files Co., on account of library	10 80
22	4	John MacFarlane, on account of library	128 06
22	5	John MacFarlane, on account of library	12 50
22	6	John MacFarlane, on account of library	34 98
22	7	Scribner & Welford, on account of library	125 52
22	8	F. W. Christern, on account of library	7 50
Nov. 6	9	Austin George, on account of library	24 60
6	10	John MacFarlane, on account of library	37 37
6	11	Scribner & Welford, on account of library	4 62
6	12	D. Appleton & Co., on account of library	10 50
6	13	John MacFarlane, on account of library	101 33
6	14	A. Lodeman, on account of library	85 18
6	15	Helen M. Post, on account of library	3 75
Dec. 23	16	Q. P. Index, on account of library	3 00
23	17	Wm. W. Payne, on account of library	6 00
23	18	Scribner & Welford, on account of library	7 43
23	19	Fred J. Schleede, on account of library	5 10
Mar. 26	20	John MacFarlane, on account of library	27 95
May 28	21	Geo. W. Hough, on account of library	20 00
28	22	A. Lodeman, on account of library	4 00
28	23	Walter Bedford, on account of library	4 00

1884.	No. of Voucher.	To Whom Paid.	Amount
May 28	24	C. W. Rogers, on account of library	$4 00
June 24	25	L. G. Carpenter, on account of library	5 00
July 9	26	John MacFarlane, on account of library	374 78
9	27	John MacFarlane, on account of library	107 53
9	28	John MacFarlane, on account of library	4 5
9	29	W. L. Smith, on account of library	50 00
9	30	John L. Atwater, on account of library	12 00
Sept. 29	31	Ypsilanti Commercial, on account of library	22 30
29	32	Ypsilanti Commercial Printing Co., on account of library	37 80
29	33	Chas. Fleming, on account of sidewalks	109 75
29	34	W. C. Stevens, on account of sidewalks	20 00
29	35	Follmore & Scovell, on account of sidewalks	570 25
		Disbursements on account of special funds for year ending Sept. 30th, 1885	$2,039 33

1885.	DEBIT.	
Sept. 30	Disbursements as per above statement	$2,039 33

1884.	CREDIT.	
Sept. 30	Balance from old account	$676 25
July 10	By cash from State Treasurer	700 00
1885.		
Sept. 30	Balance to new account	663 08
		$2,039 33

EDGAR REXFORD,
Treasurer.

Ypsilanti, Sept. 30, 1885.

STATE AGRICULTURAL COLLEGE.

REPORT.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—I herewith submit my report of the State Agricultural College for the collegiate year closing August 19, 1885, as follows:

The year has been one of great and important changes to the College, a transition period which has given much anxiety to its friends, but from which it promises to develop in continued vigor and usefulness.

Within this year it has lost its President, Secretary, and two of its professors. It has had one entirely new department added to its course, and two more so much enlarged from their former dimensions as to be practically new departments.

November 24, 1884, Dr. T. C. Abbot tendered to the Board of Agriculture his resignation of the Presidency of the College. This step was one which, owing to failing health, he had for some time had in contemplation, and had previously informally announced to the Board. The following resolutions were drawn up by a committee of the Board, consisting of Governor Begole and Messrs. Chamberlain and Reynolds, and unanimously adopted:

> *Resolved*, That in accepting the resignation of Dr. T. C. Abbot from the Presidency of the Michigan Agricultural College, the State Board of Agriculture desires to express its high appreciation of his labors in that position during the past twenty-two years, and its belief that these labors have been largely instrumental in bringing this College to its present high position among institutions of its kind.
>
> We further take pleasure in the fact that the services of Dr. Abbot will not thus be lost to the Agricultural College, but that from a Professor's chair he will continue to help forward the cause of practical agricultural education in this Institution.

Dr. Abbot's connection with the College began Feb. 5, 1858, when he was elected to the Professorship of English Literature. On Dec. 4, 1862, he was made President.

At this same meeting of the Board of Agriculture, viz., Nov. 24, 1884, it was unanimously resolved that the Presidency of the College be tendered to the Hon. Edwin Willits, at that time Principal of the State Normal School. Jan. 8, 1885, this offer was accepted and the appointment formally made, and Dr. Abbot was elected Professor of Mental and Moral Science.

Owing to Mr. Willits's engagement with the Normal School he was unable to enter upon his new duties at this College at once, and the transfer was not made until July 1, 1885, till which time Dr. Abbot continued as acting President.

On August 4, 1885, after a severe illness of six months' continuance, Robert G. Baird, who had been Secretary of the Board and College since Aug. 25, 1875, died, and Henry G. Reynolds, of Old Mission, was elected to succeed him.

Jan. 1, 1885, James Satterlee, Professor of Horticulture and Landscape Gardening and Superintendent of the Horticultural Department since 1883, closed his connection with the College by resignation, and Liberty H. Bailey, Jr., was elected to his position.

The last annual report from this College contains a statement of the detail by the War Department of the United States of Second Lieutenant John A. Lockwood as Professor of Military Science and Tactics.

Lt. Lockwood entered on duty at once, and during the past year has organized a volunteer cadet corps of ninety members, most of whom have provided themselves with uniforms. These uniforms cost from $14.00 to $20.00, and are not found to be an addition to the expenses of the students, as they simply take the place in cost of an equal amount in citizens' clothes.

Instruction in tactics and other military subjects has been given by lectures and recitations. The beneficent effects of the military training are seen in the more erect carriage of the students and in greater attention to neatness and promptness.

The Legislature at its last session treated us very liberally in providing, among other things, for four new buildings, as follows:

An Assembly Room for military drill, armory and general lecture purposes.

A Veterinary Laboratory.

A Mechanical Laboratory and a dwelling for the Professor of Mechanics.

The second of these buildings puts our Veterinary Department on a good working basis. It contains an operating room and lecture, dissecting and model rooms.

In the latter are skeletons of the principal domestic animals, sets of veterinary instruments and medicines, a life size model of the horse so arranged that it can be completely dismembered and exhibit all the internal organism, etc., etc. Our Professor of Veterinary, Dr. E. A. A. Grange, is under the law enacted by the last Legislature State Veterinarian.

Under the appropriation for the establishment of a Mechanical Department at the College a new Professorship has been established which has been accepted by Prof. Lewis McLouth, formerly of the State Normal School, and a fine large building has been completed and equipped for the new Course in Mechanic Arts. In this building there is a complete blacksmith shop and brass foundry, supplied with benches, forges, tools of all kinds and a Sturtevant pressure blower, a gift to the institution from the generous inventor and manufacturer. There is also an iron working shop, 50 by 60 feet, furnished with an engine, seven engine lathes, a planer, a shaper, a power drill, emery wheels, benches, vises, and tools and machinery necessary to a complete shop. A fine turret lathe has just been completed by the students.

There is also a large wood-working shop, supplied with two lathes, a jig w, benches, vises, and ten sets of carpenters' tools. Besides these there es, store-rooms, a large, well-lighted draughting room, a room for blue printing, a fine, large lecture-room for classes in mechanics, and a mechanical laboratory well supplied with apparatus.

The *Course in Mechanic Arts* will lay especial stress on Natural Philosophy, Drawing and Draughting, Mathematics, Surveying and Engineering, Book-keeping, Business Forms, and Law, Political Economy, and daily *shop practice* in wood and metal work.

The first two years of this course will be in outline as follows:

FIRST YEAR.

Autumn Term.—Shop Practice, Drawing, Algebra, English.

Spring Term.—Shop Practice, Drawing, Natural Philosophy, Geometry.

Summer Term.—Shop Practice, Natural Philosophy, English, Geometry.

SECOND YEAR.

Autumn Term.—Shop Practice, Algebra, Drawing, Natural Philosophy.

Spring Term.—Shop Practice, Book-keeping and Business Forms and Law, Trigonometry, Natural Philosophy.

Summer Term. — Shop Practice, Drawing, Mechanics, Elementary Chemistry.

These two years of study will constitute an *Apprentice Course* in the Mechanic Arts, and it is believed will fit those who complete it to enter the manufacturing establishments of the State with such discipline of mind, of hand, and of eye, and with such knowledge of the principles underlying mechanical trades that they may soon become intelligent and expert workmen. An additional course of two years covering, it is hoped, something of the modern languages, the higher branches of Mathematics, of Engineering and of the other Sciences that bear upon the higher phases of mechanical industries will be arranged as soon as needed.

The course in Agriculture remains much the same as last year, as follows:

COURSE OF INSTRUCTION IN AGRICULTURE.

Freshman Year.

Autumn Term.—Algebra—Thomson and Quinby. Ancient History—Swinton's Outlines. English—Whitney's Essentials.

Spring Term.—Geometry—Olney. Drawing—Morse's Mechanical Lectures. Agriculture—Lectures.

Summer Term.—Geometry completed. Botany—Gray's Lessons, Wood's Botanist and Florist. Rhetoric—D. J. Hill.

Sophomore Year.

Autumn Term.—Algebra completed: Astronomy, half term. Moral Philosophy, half term. Botany[1]—Laboratory Practice. Agriculture[1]—Lectures.

Spring Term.—Trigonometry, half term—Olney. Surveying, half term, Davies. Botany—Laboratory work, two hours daily. Rhetoric—A. S. Hill.

Summer Term.—Mechanics—Atkinson's Ganot. Elementary Chemistry—Lectures, Roscoe. Agriculture[1]—Lectures. Landscape Gardening[1]—Lectures.

Junior Year.

Autumn Term.—Mechanics completed, half term. Anatomy, half term—Lectures,

---

[1] These studies alternate throughout the term.

Martin. Horticulture—Lectures. Organic Chemistry—Lectures. Blowpipe and Volumetric Analysis—Laboratory Practice.

Spring Term.—Human and Comparative Physiology—Lectures, Martin. Analytical Chemistry—Laboratory work, three hours daily, Kedzie's Hand Book.

Summer Term.—Entomology—Lectures, Packard, Cook's Apiary. English Literature—Lectures, Shaw, Chamber's Encyclopedia. Agricultural Chemistry—Lectures.

Senior Year.[1]

Autumn Term.—Psychology—Bascom. Chemical Physics—Atkinson's Ganot. Zoölogy—Lectures. Agricultural Engineering—Lectures. Veterinary—Lectures.

Spring Term.—Logic—Jevon's Lessons, Fowler's Inductive Logic. Meteorology—Lectures. Civil Engineering—Lectures. Constitution of the United States, half term—Cooley. Political Economy, half term—Chapin-Wayland. Veterinary—Lectures. Geology, half term—Lectures. Horticulture, half term—Lectures.

Summer Term.—Quantitative Analysis—Laboratory Practice. Botany and Forestry—Lectures and Laboratory Practice. Agriculture—Lectures. Veterinary—Lectures. English Literature, half term. Philosophy of History, half term, Guizot. Astronomy.

The text-books mentioned above are those used when the several subjects were last taught, but they are liable to be changed.

Supplemental to the above general statement, it may not be amiss here to submit something of a summary of previously established departments.

A Chemical Laboratory, commodious and amply equipped, with a lecture room accommodating 150 students, experiment tables for 70 students at a time, apparatus rooms, balance rooms, and work-rooms for special investigation, offers fine opportunities to any who desire to pursue the study of Elementary Chemistry, Chemical Physics, Qualitative, Quantitative, and Volumetric Analysis, as well as such departments of Industrial Chemistry as the analysis of soils, the chemistry of vegetable growth, of various farm processes, of the dairy, and of animal, vegetable, and artificial fertilizers.

Complete courses are offered in Structural and Systematic *Botany*, and in Vegetable Physiology, in the Botany of the Grasses and other economic plants, in the Botany of the lower plants, and in Forestry. The instruction is conducted by means of laboratory work, lectures and text-books. The *Botanical Laboratory* is a large building containing ample lecture rooms, rooms for botanical collections, drying rooms, work rooms, etc., and it is equipped with microscopes, extensive collections of botanical specimens, and with all the tools and conveniences for the most extended botanical study.

For the study of *Entomology* and general *Zoölogy* there are a lecture room with 80 sittings, rooms, and appliances for anatomical and histological work, a good Zoölogical Library, a large and fine Zoölogical Museum, and an Apiary. Special attention, among other things, is given to the study of insects injurious to vegetation, their habits, and the best methods of checking their ravages.

Full courses are offered in *English Composition*, and in English Language and Literature, for the purpose of cultivating habits of correct and expressive English in speaking and writing, and to foster a taste for the best reading.

Extended courses are given in the pure *Mathematics*, in Astronomy, Land Surveying, Engineering, Mechanics, and other branches of the applied science.

---

[1] 1 studies elective in this year.

The President will give instruction in *Political Economy*, and in Constitutional Law, and Business Law, to the end that every student may gain that knowledge that is needed in business and for citizenship.

Courses in *Ethics*, *Logic*, and the *Science of Mind* are also given.

Extended practical instruction is given upon *Land Drainage*, *Rotation of Crops*, the proper cultivation of crops, the management of manures, care of farm premises and implements, breeds of domestic animals, their characteristics and adaptations, the feeding of animals, marketing, farm accounts, farm law, etc. Theoretical instruction is supplemented, illustrated and enforced by the actual working of a farm of 600 acres, with improved buildings, implements, and the various breeds of stock.

Courses are also offered in *Horticulture* and Landscape Gardening, and the College park of 100 acres—upon which the College buildings stand—the various fruit and vegetable gardens, and a fine greenhouse afford ample means of illustration.

In the department of *Veterinary Science* instruction is given in the anatomy and physiology of the lower animals, in the diseases of domestic animals, their prevention, symptoms, and cure.

A small Astronomical Observatory and a fine 5½-inch telescope add interest to the study of Astronomy.

A well selected Library of nine thousand volumes, and a reading-room supplied with daily newspapers and the leading literary, scientific and technical periodicals, are open daily for the use of students.

LOCATION OF THE COLLEGE, ETC.

The College is located on the bank of the Red Cedar river, on a tract of 700 acres of land—100 of which is a beautiful park—three miles east of the city of Lansing. The drainage and other sanitary arrangements have been so well made, and the water from the Artesian wells is so pure, that the College is noted for its exemption from malarial or other diseases. Students and faculty live in a great community together,—the students in their dormitories, and the members of the faculty in their residences upon the grounds. The discipline of the school is mild, paternal, but watchful. No saloons or shops of any kind are within three miles of the institution, so that there are few temptations for idle lounging, for the contraction of immoral habits, or for spending money unnecessarily.

A TABLE SHOWING THE AVERAGE ANNUAL EXPENSES OF ATTENDANCE AT THE AGRICULTURAL COLLEGE.

[This table is computed for one year by dividing the total expenses of the four years' course by four. The different years vary slightly.]

	Highest Possible Cost.	Lowest Possible Cost.	Probable Cost to the Average Student.
Board for 36 weeks. This varies in the different clubs from $1.80 per week to $2.70 per week	$97 20	$64 80	$81 00
Room rent, heating, and water. This varies with the room and the number of occupants (1 or 2). The number of rooms at the lowest rates is quite limited	21 00	4 50	10 12½
Incidental expenses, including sweeping and lighting the corridors, and repairing and cleaning the dormitories	7 50	7 50	7 50
Text books, drawing instruments, etc	18 00	10 00	12 00
Charges in Junior Year in Chemical and Physiological Laboratories, $12.50	3 12½	3 12½	3 12½
Matriculation, charge on entering the course, $5	1 25	1 25	1 25
Diploma on graduating, $5	1 25	1 25	1 25
Total	$149 32½	$92 42½	$116 25
Deduct wages received for labor. This may range as follows: In case of physical inability to labor	0 00		
In case the student faithfully performs all required labor			38 50
In case the student works 8 hours Saturdays and 4 hours other week days		91 98	
Balance of cost per year, not counting vacation expenses, clothing, traveling, room furnishing, or other personal items, in round numbers	$150 00	0 00	$77 75

This statement is not intended to lead young men to expect that they can go through this course without the help of money earned during the winter vacation.

The figures of the central column, while correct, are not likely to be often realized. The third column is the safest guide as to what to expect.

The following *advance payments* will be required of each new student on arrival:

	Highest.	Lowest.
Matriculation fee; to be paid but once for the whole course	$5 00	$5 00
Advance payment on account of board	20 00	10 00
Fee for incidental expenses, advance for one term	2 50	2 50
Room rent, advance for one term	7 00	1 50
Deposit required on issuing key to room	1 00	1 00
Amount necessary to furnish room	15 00	4 00
Total advance	$50 50	$24 00

FOLLOWING IS A LIST OF THE FACULTY AND OTHER OFFICERS.

dwin Willits, M.A., President, Professor of Political Science, Constitutional Law, Business Law.

Theophilus C. Abbot, LL.D., Professor of Mental Philosophy and Logic.

Robert C. Kedzie, M.A.,M.D., Professor of Chemistry, and Curator of the Chemical Laboratory.

Albert J. Cook, M.S., Professor of Zoölogy and Entomology, and Curator of the General Museum.

William J. Beal, M.S.,Ph.D., Professor of Botany and Forestry, and Curator of the Botanical Museum.

Henry G. Reynolds, M.S., Secretary.

Rolla C. Carpenter, M.S.,C.E., Professor of Mathematics and Civil Engineering.

Samuel Johnson, Professor of Practical Agriculture, and Superintendent of the farm.

Elias J. MacEwan, M.A., Professor of the English Language and Literature.

George H. Harrower, B.A., Professor of History and Political Economy.

E. A. A. Grange, V.S., Professor of Veterinary Science.

J. A. Lockwood, 2d Lieut., 17th U. S. Infantry, Professor of Military Science and Tactics.

Liberty H. Bailey, Jr., B.S., Professor of Horticulture and Landscape Gardening, and Superintendent of the Horticultural Department.

Lewis McLouth, M.A.,Ph.D., Professor of Mechanics.

Frank S. Kedzie, M.S., Assistant in Chemistry.

Louis G. Carpenter, M.S., Assistant in Mathematics.

Mrs. Mary J. C. Merrell, B.S., Librarian.

Henry W. Baird, B.S., Assistant Secretary.

Abram S. Birch, Foreman of the Farm.

Louis Knapper, Florist.

Charles S. Crandall, B.S., Foreman of the Vegetable Garden.

SUMMARY OF STUDENTS.

Graduates	4
Seniors	32
Juniors	26
Sophomores	27
Freshmen	65
Specials	19
Total	173

Wednesday, August 19, the degree of Bachelor of Science was conferred upon 29 members of the Graduating Class, as follows:

	County.	Postoffice.
Edwin S. Antisdale	*New York,*	Nyack.
William S. Baird	Ingham,	Lansing.
Edward A. Bartmess	Berrien,	Buchanan.
Richard M. Bates	Barry,	Hastings.
Fred L. Chappell	Kalamazoo,	Cooper.
James Y. Clark	Oakland,	Orion.
Charles B. Collingwood	*Massachusetts,*	Boston.
James A. Dart	Emmet,	Petoskey.
Hiram T. French	Van Buren,	Almena.
Harry P. Gladden	Ingham,	Lansing.
Elwyn T. Gardner	St. Joseph,	Centreville.
Robert W. Hemphill, Jr.	Washtenaw,	Ypsilanti.
Theries D. Hinebauch	Kalamazoo,	Vicksburg.
Charles H. Hoyt	Barry,	Irving.
Edward R. Lake	Washtenaw,	Ypsilanti.
Glen C. Lawrence	Eaton,	Charlesworth.

	County.	Postoffice.
John W. Matthews	Barry,	Hastings.
George Morrice	Ionia,	Pewamo.
Julius R. Newton	*South Carolina,*	Pendleton.
Lewis G. Palmer	Jackson,	Napoleon.
Truman L. Parker	Barry,	Carlton Center.
Wilbur I. Power	Oakland,	Pontiac.
George E. Sprang	Ingham,	Lansing.
Dorr J. Stryker	Berrien,	Dayton.
Harris E. Thomas	Barry,	Middleville.
James D. Towar	Ingham,	North Lansing.
Perry G. Towar	Ingham,	North Lansing.
Hubert M. Wells	Livingston,	Howell.
Frank M. Woodmansee	Barry,	Middleville.

The degree of Master of Science was conferred on Hon. Chas. J. Munroe, Chas. W. McCurdy and Eugene Davenport.

The following law was enacted by the last Legislature, being Act No. 81:

SEC. 1. *The People of the State of Michigan enact:* That the State Board of Agriculture be and they are hereby authorized to provide from time to time, in bulletin form, for dissemination among the people of the State, and through the medium of the public press, the results of experiments made in any of the different departments of the Agricultural College, and such other information as they may deem of sufficient importance to require it to come to the immediate knowledge of the farmers and horticulurists of the State.

SEC. 2. The several professors of chemistry, zoölogy, botany, agriculture, horticulture and veterinary science, shall each, at least twice in each year, not excluding the president and other professors, prepare for publication an article embracing such facts as they may deem of public importance, a copy of which shall be simultaneously sent to each and every newspaper published in the State, and to such persons as the State Board of Agriculture may think proper; said professors to so arrange that at least one of said articles shall be sent out as above provided, the first week of each and every month in each and every year.

SEC. 3. The Board of State Auditors shall, upon the approval of the State Board of Agriculture, audit the accounts for printing, stationery and postage incurred in the publishing and disseminating of said bulletins, and the same shall be paid out of the general fund: *Provided,* that no account for printing the same in any newspaper shall be allowed.

This act is ordered to take immediate effect. Approved May 11th, 1885.

Under the above law there have been issued the following:

BULLETINS.

No. 1, by Dr. Kedzie of the Chemical Department, Early Amber Cane as a Forage Crop.

No. 2, by Louis Knapper, College Florist, Vitality of Seeds.

No. 3, by A. J. Cook, Prof. of Zoölogy, The Black Wheat Stalk Isosoma.

No. 4, by Sam'l Johnson, Prof. of Agriculture, Feeding Experiments.

No. 5, by Dr. Beal, Prof. of Botany, Vitality of Seeds.

Very respectfully,

HENRY G. REYNOLDS,
Sec. Mich. State Board of Agriculture.

AGRICULTURAL COLLEGE,
August 20, 1885.

IN MEMORIAM.

HON. H. G. WELLS.

April 4, 1885, was a dark day to the members of the Michigan Agricultural College, for on that day the Hon. Hezekiah G. Wells departed this life.

Judge Wells was named in the law for the re-organization of the Michigan Agricultural College as a member of the State Board of Agriculture. This place he held, by renewal of his appointment by successive Governors, for a period of twenty-one years, then resigning because he was unable to attend to the duties of his office.

It is needless to say that from the first his opinions had great weight with the other members of the Board. They elected him their President, and continued him in that office to the last. He always gave unsparingly of his time and energies whenever they could help the College, and his large influence with the Legislature often secured appropriations to the Institution which, but for this influence, would have been lost.

While all departments claimed his attention, he took special pleasure in watching the improvement and adornment of the grounds. The labor system met with his earnest support and approval; on his death bed he expressed the hope that nothing might ever happen to overturn it. The formation of a Ladies' department was very much desired by him, but this he did not live to see.

He was in truth a very father to the College—wise, patient, and active. Graceful and dignified in bearing, he was a man of whose very appearance we were proud.

Judge Wells was born in Steubenville, O., June 6, 1812, educated at Kenyon College, read law in the office of J. & D. Collier of Steubenville, and was admitted to practice in 1832.

In 1840, and again in 1860, he was a presidential elector. President Lincoln tendered him the position of minister to Honduras, and President Johnson the place of consul to Manchester, England, both of which were declined.

In 1873 Governor Bagley appointed Judge Wells one of the eighteen commissioners to prepare and report a Constitution for the State of Michigan. This was prepared and submitted, and rejected by the electors. In August, 1862, Judge Wells raised in western Michigan the Twenty-fifth infantry, Michigan volunteers, Col. O. H. Moore commanding. In June, 1874, he was appointed by President Grant presiding judge of the court of Alabama claims. This court held its sessions for the first two and a half years in Washington, and entered judgment in over 2,000 cases, distributing $9,316,120.25. Gen. Grant, in his annual message in 1875 and 1876, commended in warm terms of praise the action of this court. Subsequently, when the court was re-organized, Judge Wells was again appointed presiding judge, but was compelled to resign, on account of ill health, before the work of the court was completed.

He was a man of very fine personal appearance, of large acquaintance with leading men throughout the country, and possessed a most thorough knowledge of the country, its institutions, and the statesmen of the past forty years; a fine talker, one of the most interesting and instructive; a prolific writer, having contributed to the press many valuable articles on a great variety of subjects.

He was a model in his domestic life and in his habits of living. His was the culture of one who possessed the highest tastes and the noblest views of life.

A.

INAUGURAL ADDRESS OF PRESIDENT EDWIN WILLITS.

[Delivered August 19, 1885.]

This institution is 28 years old. May 13, 1857, the buildings and grounds were dedicated by the State Board of Education, with appropriate services, in the presence of the Governor, several officers of the State government, and a large concourse of citizens from various portions of the State. It was the first Agricultural College on the continent. Other States had moved in the same direction, but Michigan forestalled all others in the enterprise of establishing an institution of learning whose sole object should be the intelligent investigation and application of subjects pertaining to agriculture, and the education of young men into a higher and, if possible, better system of farming, as well as into a cultured, practical manhood.

The enterprise had been well considered. It was the creature of the Michigan State Agricultural Society, and to the persistent exertions of that body the State largely owes the prompt consideration given to the subject. As early as December 19, 1849, at the second annual meeting of the executive committee of that society at Jackson, at which were present Governor E. Ransom, F. S. Finlay, Bela Hubbard, Michael Shoemaker and others, it was resolved to interest the Legislature in establishing a State central agricultural office, with which should be connected a museum of agricultural products and implements and an agricultural library, and as soon as practicable an Agricultural College and a model farm. A committee was duly appointed to memorialize the Legislature, and in January, 1850, Bela Hubbard, for the committee, presented the subject to the Legislature in a well-considered memorial, in which he set forth what special subjects ought to be taught, and summed up the scope of such an institution by saying that there should be taught there "those branches of education which will tend to render agriculture not only a useful, but a learned and liberal profession, and its cultivators not the 'bone and sinew' merely, but ornaments of society."

Nothing came of the effort in the Legislature in 1850, but the sentiment had grown so strong in its favor that the constitution of that year required the Legislature, "as soon as practicable, to provide for the establishment of an agricultural school." At a meeting of the executive committee of said society, December 14, 1852, Messrs. Dort, Shoemaker and Moore were appointed a committee to urge upon the Legislature the immediate compliance with the provision of the new constitution relative to the agricultural school, advising that it temporarily be adopted as a branch of the University; but that its permanent location should not be established in immediate proximity to any existing educational institution but on a model and experimental farm of 640 acres. The subject was presented to the Legislature of 1853, and while it was favorably received, it was not acted upon. In the meantime the State Board of Education had caused to be taught at the Normal School the elements of scientific agriculture, and the Regents of the University had organized an agricultural school as part of the scientific course then recently adopted, and had announced a free course of lectures in the University upon agricultural science. The friends of both institutions sought to have the proposed "agricultural school" made a branch of the institution whose interests they sought to further. The discussion became quite animated and general all over the State, so that, when the executive committee of the State Agricultural Society met December 12, 1853, the subject formed a prominent topic for action. After full discussion, on motion of Mr. Bartlett, of Monroe, it was resolved "That an Agricultural College should be separate from any other institution," and a committee was appointed to urge action upon the Legislature about to convene.

The result was that the Legislature, by act of February 12, 1855, established this college, providing that it should be located within ten miles of Lansing, the site to be on a farm of not less than 500 acres, to be selected subject to the approval of the State Board of Education, by the president and executive committee of the State Agricultural Society. The present site, then a virgin wilderness, three miles east of the city of Lansing, was, June 16, 1855, selected, and May, 13, 1857, on this very spot, as near as may be, the new enterprise was dedicated.

It is instructive to read the literature, the addresses, and the plans of that time; to follow the hopes and great expectations, not fully realized as yet, the intelligent appreciation of the necessity for scientific agriculture, and the faith that great results would follow their labors. Gov. Kingsley S. Bingham said: "One of the highest objects to be attained by the establishment of an Agricultural college is to educate and dignify the character of labor." "A new era is dawning upon the vision of the farmer—a new light is illuminating his path, and a new interest and new pleasures are urging him on to improvement. His intellect comes to the aid of his hands, and he appreciates the full dignity of his chosen pursuit."

So with prayer and prophecy they laid the foundations of this institution. From the beginning it had two difficulties to contend with. The first, the unfortunate selection of the site so far as immediate results were concerned. The second, the unsettled policy for years as to its independent status, or rather the constant demand that it should be made the adjunct of some existing institution, which, while it was not strong enough to accomplish its removal, to a certain extent crippled its efficiency and sharpened criticism.

It was a pioneer institution in the literal sense; not only was it the first of its kind, but it began at the stump, so to speak. The first tools needed were an ax to fell a tree and a spade to dig a well. It has gone through all the stages of pioneer life; it has had its corduroy roads, its chills and fevers, chills predominating; it was almost a generaation "getting out of the woods;" so that its primal energies were in a sense wasted in subduing a farm, in taking a large tract of land in a state of nature and fitting it to become a "model farm" instead of taking improved land all ready for experiment. The result was that many of the promoters of the enterprise became impatient, then cool, and finally opposed to it. They could not wait. There was not much science, of course, needed in clearing land, and the critics looked in vain, as they said, for results, except financial ones, on the wrong side of the ledger. Their clamor brought on the stump puller before nature had had time to make stump pulling economical, and so all along the line the board and the faculty worked at a disadvantage, but with heroic persistency they continued their efforts until the people began to think the enterprise pays, not always in the direct sense of financial profit in the enterprise itself, but as we hope and feel assured, in the higher field as a promoter of scientific intelligence.

We will not spend time on the second disability encountered. It needs but a casual inquiry into the fate of all those cases where an agricultural school has been made an adjunct of a purely literary or scientific educational institution, to be convinced that sooner or later the agricultural feature is lost, or plays so subordinate a part as to discourage young men from entering it, and to dishearten those who had hoped that literature and science would illuminate the path of the agriculturist. We will, before we close, attempt to explain why, logically, this must always be the result; suffice it to say that in Europe and in this country, those agricultural schools have prospered best that have retained their independent status.

But we have now passed the pioneer steps of our history, and we stand to-day well equipped for work, and better able to meet all just demands than ever before. Fair consideration of the past will demonstrate that this Agricultural College has been a potent factor in the dominion of scientific investigation and has done a grand work. Twenty-eight years ago this spot, now the center of a beautiful park of nearly 100 acres, with its outlying fields of fertile beauty, its sweeping drives and foot paths, its beautiful residences and stately structures, was a girdled clearing with its two or three college halls, the beginning of a future full of hope, and a future not without its victories and substantial results. In the years that have intervened nearly 2,000 students have entered its halls, 360 have graduated, and all, whether they have stayed months or years, have gone forth with a purpose ennobled by their associations here, and the larger proportion of them have in the following years adopted agriculture as a profession. Of the graduates over 50 per cent. of them are farmers or in kindred pursuits. Sixteen are professors or instructors in agricultural colleges, north and south, east and west. One is the president of an agricultural college. Another has almost from its foundation been a member of the Illinois industrial university, and is now president of the board. There is not a professional school, either of law or medicine, in the country which can show a larger percentage of graduates who finally follow the profession therein taught, and this notwithstanding the fact that many have entered the Agricultural College with the avowed intention of not following agriculture as a life pursuit. The doors have not been barred against such, for the reason that even these in their respective spheres of life will be instinct with agricultural tendencies, and will be active promoters of agricultural science.

So much in rapid sketch of what this college has been; now a brief outline of what it is and what it has the facilities for doing. Remark has been made of the beautiful park that lies around us. It is an open book for the daily instruction of the student, with nearly every tree and plant that can be grown in this climate duly labeled, with its lesson in landscape gardening the daily study of teacher and pupils, all an educator of refined taste, and a practical exemplification of what tree and shrub, lawn and drive can do in adorning a home.

THE FARM.

Extended practical instruction is given upon land drainage, rotation of crops, the proper cultivation of crops, the management of manures, care of farm premises and implements, breeds of domestic animals, their characteristics and adaptations, the feeding of animals, marketing, farm accounts, farm law, etc. Theoretical instruction is supplemented, illustrated and enforced by the actual working of a farm of 600 acres, with improved buildings, implements, and the various breeds of stock.

It is the purpose of the board of agriculture to have the farm managed in accordance with the best methods; to emphasize the value of order and system in all farm operations by example; to furnish a certain quota of students labor, 12½ hours each week; to give all students who desire, and make the right use of their opportunities, some knowledge and skill in most of the details, the fundamentals of farm practice.

As far as time and means will permit a portion will be used for experimental work, the testing of new grains and grasses, while the feeding of the different breeds of animals will receive attention.

THE BOTANICAL DEPARTMENT.

The botanical laboratory and museum of vegetable products, with the needed rooms, occupy the whole of a fine gothic building 46x66 feet, two stories high, with a gallery above. The rooms contain many of the most recent and valuable works on botany, a fine herbarium, including mosses and fungi; a collection of seeds, grains, grasses, fruits and preparations ready for study; the State collection of forestry products shown at Philadelphia and New Orleans, for which diplomas were given. The laboratory contains a large number of good compound microscopes, with much useful accessory apparatus.

With an arboretum of 200 species, a botanic garden of 700, greenhouses containing 1,000 species and varieties, the parks, gardens and orchards many more, the botanical department is rarely at a loss for any kind of material for study and illustration.

In 1884 an eminent eastern professor of botany who had studied in Europe and visited the best laboratories, described their apparatus, which was no better than that now used at this college. In a scientific journal he includes Michigan Agricultural College among the list of four colleges which "had taken the initiative in introducing needed reforms, and already a most promising crop of fruit is the result."

The botanical department by its testing of vegetable and grass seeds, has without doubt been largely instrumental in improving the quality of those offered in the markets twenty-five per cent., and the demonstration by a long and successful line of experiments in crossing plants grown in one place with those of the same variety raised in a distant locality, that the product is thereby largely improved in quality and amount, has met the approval of scientists, and scientific journals, and will in time be productive of substantial results whose value cannot well be measured, while the future of the 175 kinds of grasses grown in the grass plats of the botanical garden is of a promise that may well challenge competition in this country with its great variety of soils and climates. It is with great pleasure that we note the fact that the botanical department of the Agricultural College has placed itself in the front rank for scientific research, for original investigation, and in the facilities offered to students in its regular course of one and one-half years.

THE CHEMICAL DEPARTMENT.

The chemical department with its laboratory of 18 rooms, a lecture room with seats for 150 students, with two rooms for chemical analysis, and desk space for 68 students, with two rooms for quantitative work and original investigation, affording space for 20 additional students, with its choice and extensive chemical and physical apparatus, affords a rare opportunity for students in chemistry and allied sciences. In place of the traditional "one term in chemistry with experimental illustrations," the course in chemistry at this college extends through two years. The students not only witness the experiments in the lecture room, but they have the opportunity to repeat and vary them in the working laboratory. The apparatus is not designed for cabinet show, but actual use at the work tables, and the students get the benefit of this.

Of the work performed by the chemical department for the public good I need not speak in detail because it is everywhere recognized. Agricultural societies, farmers' clubs, granges, pomological associations, as well as private citizens have learned of the college laboratory. When any knotty point comes up for solution or any special subject demands investigation and careful research they instinctively look to the chemical department for aid. Year in and year out the chemical laboratory has been a scene of busy industry in promoting the public weal. The farm, the garden, and the home have been the better for these labors. The representative farmers' association of the State recognized the value of this work when it said in regard to one special investigation by Dr. Kedzie; "It has saved to the farmers of this State more than the Agricultural College ever cost."

THE DEPARTMENT OF NATURAL SCIENCES.

The department of anatomy, physiology and zoölogy is now very thoroughly equipped. The attractions in geology, zoölogy, and anatomy, are extensive, and have been selected and arranged with special reference to imparting instruction. The collections in entomology are specially valuable, and the department of economic entomology has had special consideration. In the museum and collections there is not only a manikin, but skeletons of all classes of vertebrates, models of the lower animals, and special organs, which in connection with laboratory work—dissections and the study of systematic zoölogy—makes the course very complete and gives admirable opportunity for post graduate study. The laboratories are large and convenient, and are always open for the accommodation of students.

Thorough and extensive dissections are made which give the students an accurate knowledge of anatomy. Great pains is taken to acquaint the students thoroughly with human anatomy and physiology, and without question the fullest and most practical instruction is given in entomology to be found in any general college course in the United States.

This department includes anatomy, human and comparative, physiology of man and the lower animals, entomology, structural, systematic and economic, the latter embracing agriculture and injurious insects, general zoölogy, which considers morphology and systematic zoölogy, and a brief course in geology. A large collection of injurious insects and a well equipped apiary afford excellent opportunity to illustrate the course in practical entomology.

THE VETERINARY DEPARTMENT,

recently established, promises to become of prime importance in consequence of the large interests engaged in stock raising, and the prevalence of communicable diseases among animals. With eighteen States at this hour quarantined against the stock of other States in consequence of these diseases, it is important that we should have men educated specially in veterinary science; that we have in considerable numbers persons skilled in the diseases of domestic animals, and that we no longer depend upon the limited acquirements of the old fashioned "horse doctor." The last Legislature, with commendable liberality, has afforded the college the means to erect a building especially devoted to that science, with a museum and lecture room, with operating rooms and dissecting tables, with manikin and skeletons, and all the apparatus needed to illustrate the subject as fully as the best medical colleges illustrate the subject of the diseases of the human body. All the students in the agricultural course receive instruction in this science, and their interest in the lectures fully indicates their appreciation of their importance. It is worthy of consideration whether a short special course of two years in that and agriculture combined, with the requirement of an advanced antecedent general education, might not meet a popular demand; a course that would be above "quackery" and still within reach of many who cannot devote four full years to get what they want; a course that would send out men who could write a prescription without misspelling, and indite a common business communication in good English.

THE MILITARY DEPARTMENT,

also recently established, promises to be productive of good in an exercise and drill that far excels in beneficial results all that can be claimed by the best conducted gymnasiums. With a competent instructor detailed by the War Department, with arms and accoutrements and ammunition donated by the United States, the military feature bids fair to be attractive and useful.

THE DEPARTMENT OF MECHANIC ARTS.

The college, as before remarked, was established by the State purely as an agricultural school; its sole intent was to promote scientific agriculture. In 1862 the general government donated, under certain conditions, to each of the States 30,000 acres of land for each senator and representative in Congress for the "endowment, support and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts."

Under this act the State of Michigan received about 236,000 acres of land, a little less than the round sum to which it was entitled in consequence of the shortage by actual survey of the sections donated. The State accepted the grant and in good faith promised to execute the trust. The grant was turned over to the Agricultural College already established. By the terms of the grant one of the functions of the trust was instruction in the mechanic arts, as imperative as that in agriculture, but inasmuch as the agricultural course was already in full operation and the fund from the grant was slow in accumulating, no effort was made until recently to comply with the full conditions of the gift. Last winter the Legislature was appealed to for the means to erect the buildings and furnish the equipment (which under the terms of the grant could not be taken from the fund) for the department of mechanic arts. The response was hearty, and an appropriation ample for the initiative of the new course was made, and the necessary shops are now being erected and the equipments being purchased.

The time is now propitious for the new department. It was hardly practicable to establish it sooner. There was no great public demand for it. The grant was in fact in advance of general public sentiment, but the leading spirits who advocated the land grant saw that in the near future, industrial education, in all its phases, would be a leading factor in our educational system and that, as the mechanical industries grew, instruction in the mechanic arts would become the subject of a live demand. It is so to-day. It has the platform for legitimate, deliberative discussion, and all over the country the best equipped minds and the brightest intellects are engaged in this, to us, new leading topic. Continental Europe, older in these industries, long since saw the necessity for special attention to the matter, and during the last fifty years has expended large sums in schools of technology, and the promotion of sciences lying at the base of all the industries. The result has been marvelous. England, that once ruled the industrial as imperially as she did the commercial world, at last became anxious over the competition of nations that for half a century or more have been her lavish purchasers, and began to inquire how this ability to compete in her manufactures had been brought about, and was, after a full investigation into the primal causes, compelled to admit that it was to be attributed, more than anything else, to the schools of technology and mechanic arts, which those countries had had the foresight to establish. England following the lead of her doctrinaires had adhered to the policy that the public should not be called upon to foster professional schools, but that all such, whether learned or industrial, should be the creations of private enterprise, supported by their patrons. The idea was that if there was sufficient demand for them, there would naturally be ample means and patronage for their establishment. But experience has shown that such is not the case. The plant for such institutions is costly, and the profit uncertain, hence private capital was slow in its investment in such enterprises. Education of any kind is always costly, and if made general, all experience shows that in a large measure it must be sustained by the State. But this was of a class far more costly than the so-called liberal education. It takes time to establish and develop it. Continental Europe was nearly fifty years in experimenting, and in so doing spent vast sums of money before the results heretofore mentioned were reached.

But there is an additional reason why such institutions are necessary here. In America the industrial arts are in their infancy, and we are brought face to face with the full-grown industrial organizations of Europe, with which we must compete. Mechanical science has now reached such a stage of development that the mere artisan, that is, the man who devotes his whole time and energies to the manual labor of his employment, will rarely have a comprehensive knowledge of the industry he seeks to promote. Then again, the division of labor is so great that a majority of the laborers know only one thing or perform only one operation in the many that go to make up the product, and know nothing of the general principles. The laborer becomes a machine if confined to the machine, and while the industry gains in the one direction by the skill of the human machine, it loses in the other the intelligent inventive genius of the man of observation, thought and experience. Further, the day of the old-fashioned apprenticeship is ended, or practically so, when the young man was bound to serve from 14 to 21 and the master was bound to teach all the principles and the arts of the industry, so that with the experience of seven or more years, the general knowledge picked up here and there, he became a mechanic well versed in all the principles and details of his profession.

Our industries are an important factor in our body politic; not the controlling one, but a tremendously powerful one, and our future is to be largely shaped by our ability to manufacture as well and as cheaply as any one else. To do this we must put intelligence into our shops and theoretical instruction into our schools. We must occupy this ground ourselves, with our own brains and muscle. Two-thirds of our foremen and master mechanics are foreigners, educated in the technical schools of Europe, or instructed by an apprenticeship, which is not germane to our institutions. An apprenticeship is considered by our young men but a remove from serfdom, and the only chance we have for success is to import our skilled mechanics or educate them here.

Hence there is a place, and a large and well defined one, for schools of technology; nstitutions where may be taught the sciences upon which our industries depend. The mere shop is no place for this instruction; there is neither time nor opportunity to discuss the general principles upon which the industry is based. There should be some place or institution capable of making an intelligent mechanic, intelligent in all the principles of mechanics, in the law of motion, of sound, of light, the kinds and strength of material, of friction, inertia, of electricity, steam, chemistry, with just enough of the manual training to demonstrate the principles. Such a mechanic with this knowledge can step into a shop and in a short time distance the man who has no schooling in these principles; he can sooner acquire the skill in his profession, and it will be of more service in that his intelligence goes with it hand in hand.

The object or our new department of mechanic arts is to supply this want. Our purpose and wish is to take the young man who has an aptitude and taste for mechanical industry from the shop, give him a thorough course in drawing and design, thorough instruction in all those general principles which he cannot obtain elsewhere, for the reasons heretofore stated, give him daily practical work in the shop, and then return him to the shop with a skill competent to take his place as a journeyman, and an intelligence fitting him for foremanship; with a moral purpose not above working at the bench or the forge, and yet with a capability of handling men and affairs. Such a man will as journeyman be the first to be engaged and the last to be discharged; such a man is on the high road, through the shop, to the head of his industry, a journeyman with the germ and possibilities of a master mechanic. We do not seek to make men "bosses." Our industrial foremen are a little shy of the "college-bred mechanic," for the reason, as they say, "he is apt to have the big head." But that depends upon the college at which he is bred. We grant you that the tendency of the regulation college whose purpose is a general and so called liberal education is to breed, to use the words of another, "a sort of contempt for manual labor and the man who performs it, and to give its students very stilted notions about culture and the exalted character of the work they must do because, forsooth, they are graduates." Such a man "is not calculated to blossom out into the common-sense, aggressive, enterprising young American, who is ready to do anything honorable until something better offers, and who is sure to make his way in the world." Is it possible to have a college that shall educate the scholar and yet save the artisan; that shall make the man of culture and yet preserve the farmer? We believe it is, and that the Agricultural College of Michigan is such an institution. This leads us fully to consider finally the general purposes of the College. The first one we will note is that it seeks to foster and encourage

THE INDUSTRIAL IMPULSE.

The country is full to repletion of lawyers, doctors, clerks, agents and brokers, a percentage honest, worthy, able, laborious gentlemen, ornaments to their profession, but a ge proportion living by their wits, jugglers in the strict sense of the term, making a precarious living, seeking, some of them, to wear clean clothes at the expense of a clean character, all of them desiring to live without work. We have enough of such. As a rule they have a hard time, and did they but know it, a little hard manual labor would be a tonic to their manhood. But in the first place they are shirks naturally, and in the second place they have had associations that have led them to believe that manual labor is degrading. Mere drudgery, we grant you, in any line of business is never an ennobling pursuit, but to say or believe that intelligent manual labor is degrading is a reflection on the Divine mind that created hands as well as brain. They go together. Drudgery without intelligence is slavery; manual labor with intelligence is freedom. Whatever interests a man has growth in it. Greek roots have made some very small men, the other kind many large ones. There is health and vigor in knowing how to do something; there is better health and more manly vigor in doing it. A man with a trade has a moral capability; it is a fence around his energies to keep off trespassers. The Jews used to say: "He that teacheth not his son a trade doeth the same as if he taught him to be a thief." You give a man something for his hands to do and you have taken hostage for good citizenship. The habit of daily toil is a better conservator of the peace than a paid constable. Our prisons are filled with loafers, our poorhouses with beggars and our politics with demagogues, gravitated there for the want of the little moral purpose lying behing a good day's work.

So we believe that the best legacy one can leave to a son is a willingness to work. We believe that that institution is the best that not only teaches the law, but teaches a trade; that not only teaches a science, but what to do with it; that teaches the application with mind, and heart and hand; that teaches that all labor is honorable; that trains the hand as well as the intellect. There is a moral influence around institutions as well as surrounding men; they have character as well—no two alike. The air is full of the predominating purpose. A true normal school is full of the teachers' work; instructors talk about it, students write and orate about it. So with a law or medical school; each is filled with a pervading strength—a predominating sentiment which gives character to the institution and to the students. To a like degree it is true that an institution where at stated times all work with their hands will turn out students that believe that manual labor is not dishonorable, that take pleasure in robust work directed by intelligence. Such an institution has such *morale* in it and about it that young men will leave its halls and enter the shop or go to the farm with no sense of humiliation or disgrace, capable of managing affairs of state, and of putting their hands to work at anything worth doing. Now, it stands to reason that a man so educated is a better man, a more symmetrical man, a more capable man than if he went out into the world with false notions of life's duties and life's labors. It is the little rudder that guides the large ship that without it would go upon the rocks; so it is this moral purpose that lies behind a man's forceful energies, to use them well and honestly, that saves many a strong nature from shipwreck.

We believe this College has the power to make just such men, and we proclaim to all the world that we do not want a young man that is ashamed to work with his hands as well as his brain. If he can accomplish more by brain work after he leaves us, well and good, we do not object; but whether he can or not, he will not feel above work in the shop or on the farm. He will do that cheerfully because he will feel there is no disgrace in it. That is the initial point in the character of the young men we seek to send out. We want no loafers here and we shall mourn over every loafer who carries our degree with him into the busy world to which we accredit him. Therefore, we ask the people of this goodly State to consider the matter, and if they wish their sons to come to us we will try to equip them in mind and body, and to send them back with this industrial purpose.

The second general purpose of this College is to make it an institution of

APPLIED SCIENCE.

The sciences deal with the *non ego*, more directly with that great world outside of the personality of the individual, first with the facts and then the laws of the material universe, and thus they garner a harvest of comfort and material wealth that is so obvious and so charming and so delightful to the senses, that in this practical age we acknowledge their utility. Therefore the practical man and the so-called practical sciences demand a premium. Practical men are paid the highest wages. The theoretical man who develops the principles of a science is not to be ignored, but it is the man who can apply the principles evolved by the man of theory that commands the situation. This, therefore, is the age of applied science. Applied to commerce, manufacturing, and all the varied industries of modern life. The world's progress is measured by the bounds of its applied sciences and its prosperity by the amplitude of the practical arts. For this reason we have the demand that our system of education shall include both theory and its applications, and that the State shall furnish both.

In the line of this demand the State of Michigan has formed this College, and the United States has largely endowed it. For every science taught we have the amplest facilities for its application. For agriculture, the farm; for chemistry, laboratories and apparatus for the most minute and the most extensive analysis; for botany, the museum, the greenhouses, the botanical gardens; for the natural sciences, a well-stocked museum and apparatus and operating tables; for landscape gardening and horticulture, the park with all its varied beauties; for military tactics, a large drill room and armory, and muskets and accoutrements; for veterinary, a museum and operating rooms; and for the mechanical arts, large and fully equipped shops, with engineering, mathematical apparatus, and with a complete line of apparatus to illustrate the physical sciences. In all these departments, not only are the theories taught, but the application goes hand in hand with the principle; skill and knowledge go together. There is no institution in this land that more fully than this realizes the ideal of the new system of education, "the teaching how to do by doing." At every step the application enforces the principle. It, therefore, goes without contradiction that a student that has taken this course not only knows as much as, but can do more than, a student that has only the theoretical instruction. In this regard we are justified in claiming for this institution a practical as well as a thorough education. It is not merely a school of observation and instruction, but a school where the students work in all its departments; on the farm, in the park, in the garden, in the laboratories and the museums, on the drill ground, at the dissecting tables, and in the shops. The students are an important working factor in all branches taught and demonstrated here, and in the end it must tell in the more enhanced prosperity of our State.

The third and last general purpose we will note it is hard concisely to state. It is expressed, perhaps, the best by saying that the College is

AN EXPERIMENTAL STATION.

Experiments are constantly being made in all the departments. Many are inconsequential and useless; many never see the light of day, but all contribute to the general knowledge of the subject. It is as important to know of a failure, and if possible its cause, as of a success. There has been in the country at large disappointment over the meagreness of the results in agricultural experiments up to this time. An impartial consideration of the matter would disarm most of the criticism. The failure lies in the nature of the subject. There is an incertitude in agriculture that does not exist in the exact sciences. Such is the variety of seed, soil and climate; so inconstant is the weather, so many perils of water, drouth and insects beset the paths of the agriculturist between seed time and harvest, that no man can predict with assurance the result of is labors, and no experiment can promise absolute success in all places and by all persons. The consequence is that a large range of experiments is necessary with a more extended range of years; but of the grand aggregate result there can be no question. The introduction of a new variety of seed may in a single year pay well the expense of all the experiments in the past. It is only by trying and testing that the best is found, or the bad eliminated. It is to be hoped that Congress will pass the bill appropriating funds to make all the agricultural colleges experimental stations, and that thereby these colleges may have an assurance of permanent means systematically to follow for years a line of practical experiments. This College, as has been noted, has not been barren in these results, and the promise may be safely given that in the future it shall, if possible, improve on them.

Gentlemen of the Board of Agriculture and ladies and gentlemen: This institution has closed another year of its existence. To-day has gone forth with the seal of our approval a class of young men who are to justify by their deeds the expense and labor here bestowed upon them. The impression may obtain from the fact that so much has been said about the material facilities here furnished for an education, that but little care or stress is laid upon the general culture of our students. Nothing is further from our intention. We cannot be oblivious to the fact that the man exists before the farmer or the mechanic, and that every system of education, to be harmonious and complete, must include that general culture that forms so important a function in life's work. We must not and we do not forget that pure English, sound logic, a wide range of historical reading, a thorough knowledge of the fundamental and business laws of the land, and well defined views of political science and mental and moral philosophy are necessary elements in a practical education. For all these ample provision has been made. But above and beyond all we should remember that morality, virtue and religion are the corner stones of a true character, and that this institution should inculcate pure morals and the highest virtue, and should exemplify in the fullest sense our daily obligations to our Divine Benefactor. It is for us of the administration to assure the people of the State, that by our example and by our precept we will be true to the higher duty, and that so far as in us lies we will preserve this institution free from the contamination of vice, and will send out from our halls the young men committed to our charge not only uninjured by their associations here, but better fitted to become good, loyal, Christian citizens.

STATE PUBLIC SCHOOL FOR DEPENDENT CHILDREN.

REPORT OF SUPERINTENDENT.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR: I submit herewith the following statement of the educational department of the State Public School for Dependent Children:

Three hundred and thirty-four pupils were enrolled in the school Sept. 30, 1884; 194 have been received during the year ending Sept. 30, 1885, making a total of 528 who have been in the several departments during the year.

The following table shows the present age of the school:

TABLE VII. PRESENT AGE OF THE SCHOOL.

Number between 2 and 3	**2**
Number between 3 and 4	**4**
Number between 4 and 5	**9**
Number between 5 and 6	**23**
Number between 6 and 7	**35**
Number between 7 and 8	**37**
Number between 8 and 9	**40**
Number between 9 and 10	**40**
Number between 10 and 11	**32**
Number between 11 and 12	**25**
Number between 12 and 13	**11**
Number between 13 and 14	**9**
Number between 14 and 15	**3**
Number between 15 and 16	**1**
Number between 16 and 17	**1**
Total	**272**
Average age	**8.1-5 years**

From the above table it will be seen that our school is purely primary, the average age being but 8.1-5 years.

Most of our children have been deprived of school advantages before coming here, so that their real standing is even lower than would be expected of children generally at their age.

The following is the course of study pursued in our schools:

COURSE OF STUDY.

Kindergarten.

Games on Circle, Drawing on Slates, Work at Tables, Singing.

First Grade.

Chart and First Reader, Singing, Geography of the School-room, Addition, Making Figures, Counting to One Hundred, Drawing on Slate, Spelling.

Second Grade.

First and Second Readers, Spelling, Singing, Writing on Slates, Study of numbers to ten—four operations on each number.

Third Grade.

Appleton's Second Reader, Appleton's Third Reader, Swinton's Introductory Geography, Spelling all words in Reader, Milnes' Elementary Arithmetic, Milnes' First Lesson in Arithmetic, Writing.

The following table shows the present standing of the school:

TABLE VIII. PRESENT STANDING OF THE SCHOOL.

Number reading in chart	42
Number reading in first reader	51
Number reading in second reader	25
Number reading in third reader	32
Number able to write letters	45
Number able to add practical examples	32
Number able to subtract practical examples	32
Number able to multiply practical examples	18
Number who know the multiplication table	18
Number who are studying Outlines of Geography	13
Number who are studying Swinton's Introductory Geography	19
Number who are studying Milnes' Primary Arithmetic	27
Number who are studying Milnes' Elementary Arithmetic	18

The great work of this school is that of placing children in homes, and looking after them when so placed. Notwithstanding this and the fact that our pupils are nearly all changed each year, it has been our purpose to give them the best possible facilities for education while here. To my mind there is no more important duty devolving upon the management of this school than to see that the schools are as well equipped and as thoroughly taught as any in the State. In order to do this, the first requisite is a well-lighted, well-aired, properly warmed and ventilated school building. This we did not have. The school rooms were in a wing of the main building. With one exception the rooms were dark, improperly shaped, poorly ventilated and insufficiently warmed. Some of the rooms were so poorly lighted as to necessitate artificial lighting before 4 o'clock p. m. of short or dark days. The influence of such poor lighting was manifest in the growth of near-sightedness among the children. Every effort had been made to properly ventilate these rooms; but as the building was not constructed with proper ventilating facilities, it could not readily be done. The institution was in need of additional room for chapel purposes, in order to arrange for Sunday school classes and accommodate visitors who find it pleasant to attend our Sunday services. We were also greatly in need of additional rooms for employés. We had found that the cottage built for 60 children was too large for the true family system, and admirably adapted to the purpose of a school building, with little expense in changing.

Having become satisfied that our facilities were sufficient for the present need of the State without this building, it was deemed wise to at once fit up Cottage No. 10 as a school-house. It was also decided to convert the first floor of the east wing into a chapel and the second floor into rooms for employés, thus at once enabling us to meet several of the important necessities of the institution at a nominal expense, without asking the Legislature to make an appropriation for either chapel or school-house, and deferring the expense of building any additional buildings until the growth of the institution may properly demand them. In April last the new school building was fitted up, and we now have school rooms light, airy, warm, and well ventilated; in all respects comparing favorably with any school rooms of the State.

The first floor of the east wing has been made into a pleasant, cheerful, and roomy chapel, capable of seating 500 persons. It gives ample room for Sunday school classes, and tends to create in the minds of the children increased reverence for sacred things.

THE KINDERGARTEN.

While all the departments are purely primary, it is the place of all places in the school where the best teachers should be employed and the best methods inaugurated. The disadvantages attending the teacher's work in a school like ours have been so frequently mentioned as not to need repetition here. They are acknowledged by all who are familiar with the work. This being so, it is important to introduce such improved system as will assist in securing the greatest possible good to the children. As suggested in my last report a Kindergarten department was to be started, and the wisdom of this departure in the school work has already been shown. It has been a most useful adjunct to the schools, and its results have been better than I even dared to hope. It has done much by its interesting mechanical work to enliven dormant powers, and to bring into activity mental resources of children who were considered of doubtful mental ability. It has thus saved possibly from a poor-house life one or two children who, without this awakening process, would have been properly considered feeble-minded. While it brightens and awakens sleeping intellects, it does much for the already bright ones. It furnishes pleasing occupations for willing fingers and saves them from getting into mischief. It teaches geometrical forms, color, qualities of objects, number, and by easy steps trains to observation, comparison and invention. Its moral training cannot be over-estimated. At a time in life when easily influenced, impressions for good are made which will be lasting. Honesty, politeness, courtesy and graceful movements are taught in such a way as to develop the true lady and gentleman. These little waifs, many of whom are old beyond their years for lack of anything to brighten life, are made happy beyond description for four hours each day. With their action, songs, marching, working with pretty colors, making something with their own fingers, talking to each other almost constantly, the time of the session passes before they are ready to go home. If no other reason existed to justify the establishment of this department, to my mind that would be sufficient.

The other departments are doing good work, yet we hope for better results to constantly follow from improved methods in school work.

The officers and teachers employed in the school are as follows:

John N. Foster, Superintendent; F. W. Morgan, Clerk. Teachers: Miss Ella F. Corwin, Miss Lucelia E. Staples, Miss Nettie Brown, Miss Julia E. Goodman, Miss Sarah B. Goodman, and Miss Jessie Curtis.

Respectfully submitted,

JOHN N. FOSTER,
Superintendent.

ADRIAN COLLEGE.

REPORT OF THE PRESIDENT.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—I have the honor to submit the following report of Adrian College for the year ending June 25, 1885.

The number of students enrolled for the year was one hundred and eighty-six.

At the commencement in June the following degrees were conferred:

Bachelor of Arts	5
Bachelor of Music	8
Master of Science	1
Master of Arts	1
Doctor of Divinity	1
Graduated in Normal School	3

REQUIREMENTS FOR ADMISSION.

CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS.

Students will be admitted as condidates for the degree of Bachelor of Arts, upon passing a satisfactory examination in the following branches of study:

I. ENGLISH LANGUAGE.—Elements of English Grammar; Analysis of Sentences; Orthography and Orthoepy; Punctuation and the Structure of Sentences.

II. GEOGRAPHY.—Political and Descriptive Geography of the United States and Europe; Physical Geography; Ancient Geography, especially that of Greece, Italy and Asia Minor, should be studied along with the preparatory Greek and Latin.

III. HISTORY.—History of the United States; classical students should also be taught Roman and Grecian History in connection with the preparatory classical studies. Leighton's History of Rome and Smith's History of Greece are recommended as text-books.

IV. MATHEMATICS.—*Arithmetic.* The fundamental operations—Common and Decimal Fractions, Compound Numbers, Proportion, Percentage, Involution and Evolution, and the Metric System of Weights and Measures.

Algebra. Definitions and Fundamental Rules, Factors, Fractions, Elimination, Involution and Evolution, Quadratic Equations, Simple Indeterminate Equations, Inequalities, Theory of Exponents, Logarithms, Ratio, Proportion, Variation, Series, Binomial Theorem, Undeterminate Coefficients, Exponential Theorem, Differential Method, Equations in General, Higher Numerical Equations.

Geometry. Plain, Solid and Spherical Geometry.

V. PHYSIOLOGY.—As much as is presented in the smaller text-books upon the subject.

VI. PHYSICS.—Elementary Principles in Mechanics, Hydrostatics, Pneumatics, Sound and Light, Heat and Electricity.

VII. CIVIL GOVERNMENT.

VIII. LATIN.—*Grammar.* A thorough preparation in the elements. Allen and Greenough's Grammar is recommended; but the Manuals of Harkness, Chase or Gildersleeve may be used for this purpose.

Prose Composition. Jones's Exercises in Latin Prose Composition; or Harkness's Introduction to Latin Composition, from page 50 to page 166; or forty-four exercises in Arnold's Latin Prose Composition.

Reading. Four books of Cæsar's Commentaries; six select orations of Cicero; and the first six books of the Æneid, to be accompanied with the study of Prosody. The Roman pronunciation of Latin is used. It is believed that three years of earnest labor, with good facilities, will be sufficient for this work, but many students will find it desirable to devote four years to the above preparatory course in Latin.

IX. GREEK.—Thorough preparation in the essentials of Grammar. Goodwin's Grammar is used and recommended.

Prose Composition. Jones's Exercises in Greek Prose Composition, with the accents. An equal amount of work in any thorough text-book will be accepted.

Reading. Three books of the Anabasis; selections from books VI, VII, VIII of Herodotus. Close attention will be paid to the Grammar of the texts read, and students will be expected to show familiar acquaintance with the history and geography. Two years of faithful study will be required to complete this preparatory work.

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE.

The requirements for this course are the same as for the Classical, except that a student will be required to complete only three years in the study of preparatory Latin or Greek.

CANDIDATES FOR THE DEGREE OF BACHELOR OF PHILOSOPHY.

The requirements for this course are the same as for the Classical, except that a student may omit either the Latin or the Greek.

CANDIDATES FOR THE DEGREE OF BACHELOR OF LETTERS.

Ladies only are admitted as candidates for this degree. The requirements for admission are the same as for the Classical, except that Greek and Geometry are omitted, and one year only of Latin is required.

REQUIREMENTS FOR GRADUATION.

Four degrees are open to undergraduate students; the degree of Bachelor of Arts; the degree of Bachelor of Science; the degree of Bachelor of Philosophy; the degree of Bachelor of Letters, this last degree being conferred on ladies only.

THE DEGREE OF BACHELOR OF ARTS.

A student having completed at least 750 hours of work in the Department of Classics, and presenting certificates for the same, and, in addition, presenting certificates from other departments, sufficient to comprise altogether 2,200 hours' class-work, shall be entitled to the degree of Bachelor of Arts.

The Ancient Languages are made the required basis of this degree, while the student is allowed to select from the courses of study, in other departments, such branches as his attainments and purposes prepare him to pursue with success. Thoroughness and comprehensiveness in those studies appropriately forming the foundation of this degree are thus combined with the greatest latitude in the selection of such studies in addition as shall be best adapted to the aptitudes and life-purposes of the student.

THE DEGREE OF BACHELOR OF SCIENCE.

A student having completed at least 375 hours of study in the Department of Mathematics, and 375 hours in Physical Science and Natural History, together with a sufficient number of courses in other departments to amount in all to 2,200 hours, shall be entitled to the degree of Bachelor of Science.

This degree secures that the student is well grounded in Mathematics and the Natural Sciences, and permits the selection of such courses of study in other departments as the student may find consistent with his attainments and preferences. It is a course of study particularly adapted to those who contemplate pursuits in life that require a knowledge of the exact sciences and rigorous mental discipline.

THE DEGREE OF BACHELOR OF PHILOSOPHY.

When a student shall have completed at least 750 hours of study in the Departments of Philosophy, English Literature, History, and Political Science, together with a sufficient number of courses in other departments to amount in all to 2,200 hours, he shall be entitled to the degree of Bachelor of Philosophy.

The requisites to this degree are such as to secure the student taking it a special knowledge of English language and literature, and of the Mental and Political Sciences. It comprehends a field of knowledge and discipline especially valuable to the student who proposes entering a profession involving public speaking or writing, as the law, the ministry, or journalism.

THE DEGREE OF BACHELOR OF LETTERS.

Ladies only are admitted as candidates for this degree.

When the candidate shall have completed at least 750 hours of study in the departments of English Language and Literature, Modern Languages, History, and Music, together with a sufficient number of courses from other departments to amount in all to 2,200 hours, she will be entitled to the degree of Bachelor of Letters.

A credit of one hour will be allowed for each lesson taken in Instrumental or Vocal Music. Credits also will be allowed for all studies pursued in Latin, Greek, or Mathematics, following those required for admission as a candidate for this degree.

This degree is adapted to young ladies who do not care to become candidates for the more exacting collegiate degrees, and who wish to give more particular attention to Music and Literature. Its purpose will be to give an extended acquaintance with English Literature, Music, and Polite Letters in general, and at the same time to give opportunity for attainments in other directions. While somewhat less rigorous in its requirements than the other degrees, it is believed it will secure a good general culture, and prepare especially for the social and domestic duties of a refined and useful life.

EXPENSES AND ACCOMMODATIONS.

Tuition and incidental expenses are $9.00 a term. Library fee, 50 cents a term. These are the only expenses in the literary department, aside from the cost of living, books, etc.

The expenses of a year at college for tuition, board, room rent, and fuel will vary from $90.00 to $150.00, according to the manner of living.

In cases where the parent or student do not care to be troubled about the arrangement of details, the College will supply the student with board, room rent, fuel, tuition, and incidental charges in the literary department for $150.00 per year, of which amount $58.00 shall be paid in the fall term, and $46.00 each of the remaining two terms.

In the College Dining Hall the past year board has cost $2.00 per week. In clubs it ranges from $1.50 to $1.75 per week. Some students board themselves at less cost. The College gives special facilities to students wishing to economize in this respect. Rooms supplied with cooking-stoves, utensils, cupboards, etc. are furnished both to young gentlemen and ladies wishing to board themselves. The authorities of the institution feel that every practicable facility that can be afforded those who are struggling for an education under difficulties should be supplied.

The following table gives some idea of the expenses for one year at college. The board is, of course, the principal item of expense. This item varies according to the manner of boarding:

College charges, one year	$28 50	to	$28 50
Board, one year	40 00	"	90 00
Room rent and fuel, one year	15 00	"	40 00
Washing and light, one year	8 00	"	12 00
Books, one year	4 00	"	10 00
Total	$95 50	to	$180 50

A laboratory fee of $5.00 is charged students who take the course in Analytical Chemistry.

A diploma fee of $5.00 is charged to those graduating.

The Boarding Hall in connection with the College is conducted by parties under supervision of the Faculty and the Executive Committee of the Board of Trustees. By this arrangement the price of boarding per week will not, it is believed, exceed $2.00, and any variation in the price will hereafter depend upon the changes that occur in the prices of necessary supplies. It is the purpose of those having charge of the hall to keep the price of board as low as circumstances will justify, in order to cover actual expenses.

ROOMS.

The dormitories for gentlemen are conveniently adapted to their purpose. The rooms are heated by steam. Ceilings are high and ventilation good. The rooms mostly go in suites of a study-room and bedroom attached. A bath-room has been constructed in the building for the use of students. No more commodious rooms can be found in any institution in the West. The dormitories for the young ladies are in South Hall. The Dining Hall is in the same building, so that in going to meals the ladies are not exposed to the weather.

In the Ladies' Hall there are both furnished and unfurnished rooms. The furnished rooms have good carpets, beds, stoves, bureaus, wash stands, tables, chairs, crockery, window shades, and everything needed except towels, soap, and bed-clothing, which must be furnished by the occupants. Room rent per term, for each student, from $9.00 to $10.00 for furnished rooms and from $3.00 to $5.00 for unfurnished rooms.

Arrangements have been made by which hot water heating has been introduced in South Hall.

There are a few furnished rooms in North Hall for young gentlemen, provided with the same articles as furnished rooms in the Ladies' Hall. Most of the rooms in this Hall, however, are unfurnished. The rooms are adapted to the accommodation of two students, comprising, as most of them do, a sitting-room with bedroom attached. Room rent per term for each student, $6.50 to $9.00, including heating of the room by steam.

In the buildings heated by steam the price of heating is included with the room rent.

SUMMER SCHOOL.

A summer session of five weeks of the Normal School has been established for the benefit of teachers in the public schools. The first session was well attended the past season, and the enterprise proves to be one of great advantage to the teachers of this and neighboring counties. Besides affording instruction in all those branches in which teachers wish especially to qualify themselves, the summer school presented a course of daily lectures on themes of interest to the teacher. It is proposed to make the summer school a permanent feature in our work.

CHARACTER BUILDING.

The demand of the present age is for a culture that strengthens the moral and active part of human nature, as well as the intellectual and reflective. In accordance with this belief we are giving special attention to the question of instituting more effective and systematic methods of moral education. It is believed that more systematic and progressive methods than many in general use may be derived for assisting the student in forming and establishing character.

Character is established only when the habit of self-regulated activity is attained. Hence the development in the student of a power of self-control, illuminated by a disciplined intellect and a well informed mind, is the aim at which our efforts in this respect are directed. We aim to awaken in the student a spirit of manly self-reliance. We desire to rely upon the developed love of the good, and the awakened sense of justice as more potent influences for conduct than a multiplication of rules and restraints. Whenever it is possible with safety to entrust the student with responsibilities that will deepen these sentiments, we aim to do it. This is kept in view both in the discipline and government of students, and in the courses and methods of instruction. In respect to the first, the students are as far as possible, recognized as members of a community, sharing to some degree the responsibility of its management. To this end there has been established among students a law and order league, of which all students are members. This organization has in view the discouragement and suppression of such unmanly and disorderly conduct as may be annoying to students or injurious to their good name, and expresses its will through a court composed of officers elected by the students themselves. The students also are entrusted with the management of the affairs of the college dining hall. The employment of help, purchase of provisions, etc., is in the hands of officers elected by the students. Board by this means is furnished at cost, and they are initiated to some extent into the responsibilities of practical business affairs.

But a still more important recognition of the autonomy of the student is observed in the arrangements governing the order of studies. The system of election in determining the order of studies, so fully recognized by Harvard, Michigan University, and other institutions, is here applied under conditions that, it is believed, secure the greatest advantages without some of the defects that grow out of the system. This institution was among the first to adopt a consistent and conservative application of this idea. While it was acceded that the student should be granted the greatest liberty in the selection and order of studies consistent with thoroughness, yet it was kept in mind that there was a logical sequence in studies which could not be violated without loss; and also that while the greatest latitude in the range of studies should be permitted, so that the individual aptitudes and purposes of each student might be met, yet it was recognized that there should be a coherence of studies throughout the course, and a concentration of attention to at least one of the leading departments of knowledge to a degree approaching completeness. To preserve the first of these requisites, each study in the course requires, as conditions for entrance, the completion of "preliminary studies," comprising all those branches that logically lead up to, and prepare for success in, the study desired. The student, thus, while freed from all arbitrary and artificial restrictions in the selection of his studies, is still obliged to observe that natural order of studies which grows out of the logical connection and character of the studies themselves. In the second place, to secure unity in the courses of study pursued by those graduating, and to give appropriate significance to the degrees conferred, it was provided that about one-third of the studies pursued to obtain either of the degrees offered by the college should be selected from those departments that naturally form the basis of the degree. For instance, the degree of Bachelor of Arts requires that seven hundred and fifty hours out of the twenty-two hundred necessary for graduation be given to the studies of Latin and Greek, which departments are regarded as the natural basis for the Arts degree. It is now ten years since this plan has been in operation in our institution, and its successful operation, the desirable results obtained, the adoption of similar plans by other institutions, all go to show that the step taken was in the right direction, and one that the times demanded.

One other important measure bearing on the formation of character has been introduced. A course of instruction bearing directly upon those principles that underlie the formation and establishment of character has been begun. It will be the aim of this course to familiarize the student with those laws of human nature that are related to this subject, and to incite and conform in him right dispositions. It will differ from the instruction usually given in ethics and moral science in colleges, in that it will be practical and personal in its aim, rather than theoretical and abstract. Lectures on character building, together with a course of reading bearing on the subject will be combined with such other methods, more personal in their character, as shall aid the student in obtaining control of disposition and correctly guiding conduct. How to strengthen and confirm approved dispositions, and how to weaken and destroy objectionable elements of character, will be among the prominent questions considered. This new departure assumes that more systematic and progressive methods than those in general use for assisting the student in forming and establishing character can be made practicable. It will aim to bring to moral training the same continuous, orderly methods that are already made use of in intellectual development.

The religious influences connected with the college also tell strongly in the formation of character among students. The Y. M. C. A. and the Y. W. C. A. are vigorous and active in their work, and through their exertions many students have been led to enter upon a Christian life.

Respectfully submitted,
D. S. STEPHENS,
President.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

DEAR SIR,—The undersigned, visitors to Adrian College for the year 1885, would respectfully submit the following report.

Our visit was made May 29, on a day when the ordinary work of the institution was being done. The authorities in charge granted us full opportunities for observing the exact condition of the school, the character of the methods employed, the spirit and proficiency with which the work is carried on, and we believe the conclusions we have reached are based on an average every day state of affairs.

The neat and well-kept condition of the grounds and buildings indicate that pains are taken to place the student in the midst of such surroundings as will aid rather than hinder him in his work.

The work of instruction seems to be well done, each department being under the supervision of a teacher who manifests special aptitude and who has made thorough preparation for his work. Especially would we commend the work of personal experimentation carried on by the students in the department of Physics.

The museum is large and comprehensive, and must prove of great aid to the student in the department of Natural History.

The literary advantages, through the well manned department of college instruction and through the thoroughly organized and judiciously conducted literary societies, are superior.

We also noticed with pleasure that along with a thorough culture of the intellectual faculties a well directed effort is made to secure the harmonious development of the higher moral and religious sensibilities.

The library is deficient, and ought to be speedily enlarged.

We believe there exists a legitimate field of usefulness for this college; a field which President Stephens and his associates are anxious to occupy, and in which it may prove a powerful ally to the church by which it was organized and from which it largely draws its patronage and support.

We commend the determination of the authorities, which is also generously and at great personal sacrifice concurred in by the faculty, to so manage the financial affairs of the institution that the current expenses shall be brought strictly within its actual income. On the other hand the friends of the college ought to appreciate the fact that this is wisdom only for the present. The college can only attain to, and hold the rank it ought, by immediate and generous additions to its endowment.

Respectfully submitted,
DELOS FALL,
WASHINGTON GARDNER,
Visitors.

ALBION COLLEGE.

REPORT OF PRESIDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir—Believing that all institutions of learning chartered by the State should perform their work under the direct or indirect supervision of the State, and recognizing the right of the State to hold them responsible for the mode and character of their work, I take pleasure in presenting a report of the operations of Albion College for the year 1884-5.

The board of instruction is as follows:

Lewis R. Fiske, President.
Rena A. Michaels, Preceptress.
Carl B. Scheffler, Director of Conservatory.
Rollin C. Welch, Secretary.
Rev. L. R. Fiske, D. D., LL. D., John Owen professorship of Intellectual and Moral Philosophy.
Rev. Rollin C. Welch, A. M., Greek and Hebrew Languages and Literature.
Rev. Samuel Dickie, M. S., Ezra Bostwick Professorship of Astronomy.
Delos Fall, M. S., David Preston Professorship of Biology and Chemistry.
Samuel O. Knapp, Professorship of Geology and Mineralogy.
Fred. M. Taylor, A. M., History and Belles-Lettres.
Carl B. Scheffler, Piano, Harmony and Counterpoint.
Rena A. Michaels, Ph.D., Modern Languages.
Samuel D. Barr, A. M., Mathematics.
Robert S. Avann, Ph.D., Latin Language and Literature.
Stewart F. Ganung, Piano and Organ.
Mattie A. Reynolds, Violin.
Ella M. Smith, Voice Culture and Guitar.
Josephine B. Mann, Drawing and Painting.
E. Josephine Clark, instructor in English Language and Literature.
R. A. Martin, M. D., instructor in History and Civil Government.
Charles H. Gordon, teacher of Book-keeping.

The number of students in attendance during the year, and their classification, will appear in the following summary:

COLLEGE.

Post Graduates	2	
Seniors	8	
Juniors	11	
homores	17	
nen	19	
ied	4—	61

PREPARATORY DEPARTMENT.

Fourth Year	21	
Third Year	16	
Second Year	23	
First Year	37	97

SCHOOL OF ART.

CONSERVATORY OF MUSIC.

Students on Piano	83	
Students on Organ	6	
Students on Violin	23	
Students on Cello	3	
Students on Guitar	4	
Students in Voice Culture	38	
Students in Harmony	25	182
Counted before		53
Total in Conservatory		129

PAINTING.

Students	17

ACADEMIC.

Students	50
	354
Deduct for twice counting	29
Total	325

The Trustees and Faculty have sought to accomplish the following:

1. To make the courses of study and the range of instruction as comprehensive and thorough as are supplied by the leading institutions of the country;
2. To employ the most rational methods.

We invite attention to our requirements for admission into college. The character of these requirements differs from those prescribed by the majority of institutions—for reasons we will mention—but in the amount of study demanded they are not below those existing in the very best colleges in the United States. It would please us if the State, through some agency, would scrutinize the work of institutions which grant degrees, to prevent the exercise of such a prerogative except where some prescribed standard is reached. Is it not unwise to allow a margin of one, two, or three years in the extent of study required.

In some of my previous reports I have given somewhat at length the principles of the system under which we are now working, which, as is known, differs materially from the order adopted in colleges generally. I will therefore give only a brief statement of our method. The first inquiry that arose was this: Is it possible to settle upon a specific, definite order of work which is philosophical, which, in other words, is demanded by the laws of mental activity? That the principles of cognition under which the mind must proceed require some definite plan of operation is evident to every thoughtful educator. There must be a natural movement in contrast with other movements which are not natural. The next question that arose was: Are the usual college movements natural? To the consideration of this question much time and thought were given. The conclusion reached was that a reconstruction of college methods was demanded; that the greatest efficiency in college work could not be secured without it.

In the reconstruction attempted we started out with the following proposition: That which is nearest to the student; that for which his previous studies would best fit him; that which in the order of acquisition is most fundamental, this should occupy the earliest place in the curriculum. "The genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race." The genesis of knowledge in the race has been a development, proceeding from that which is nearest towards that which is more remote. To attempt to force the mind into a knowledge of the abstract before it learned the concrete is certainly a violation of the law of mental activity. Thus, first, that which is nearest in thought, the simplest, the most fundamental, the empirical, the concrete; then the rational, the abstract, the more remote. Modern foreign languages are nearer to the English than the Latin and Greek are; they are also simpler, and will tax the intellect of the boy less, while they open the way to the living literature of the civilized world; hence in our curriculum the modern precede the ancient languages. When a facility in the acquisition of languages has been gained we put the student at work in learning the languages which are most difficult.

Modern history is the history of to-day, of events and forces which belong to the present, in which we have a living special interest. The 19th century is the outgrowth of the past, and a careful survey of the same will give the student the statement of the historic problem which can be solved by a careful study of the centuries preceding. Modern history first, so that ancient history can supply an intelligent solution of the life and development of the great nations which now govern the world.

WHAT IS NOT PROPOSED BY THIS MOVEMENT.

1. This movement does not propose to inaugurate any course of study which will supply less of culture than the time-honored classical curriculum of the very best colleges of the country.
2. It does not propose to supplant Latin and Greek with any other line of work.
3. It does not propose to dispense with system by introducing irregularity.
4. It does not propose to allow unlimited elections, especially in the lower classes of the college.
5. It does not propose to confer the degree of A. B. in disregard of the nearly universal judgment that Latin and Greek are essential to the highest culture.

WHAT IS PROPOSED BY THIS MOVEMENT.

1. It is proposed to teach the French and German before the Latin and Greek.
2. It is proposed to teach as much Latin and Greek as are provided in the leading colleges of this country, but to put these studies later in the course, in order to get the advantage resulting from an earlier knowledge of the modern languages.
3. It proposes to supply the student with a very comprehensive course in history, as necessary to the broadest culture.

4. It proposes to introduce the student to modern history, to make him acquainted with the condition of the world of to-day, and then take him back into the historic causes which have operated to produce the national and social life of the present.

5. It proposes in the earlier portions of the college course to give the student the simpler problems to solve, these to be followed by the more complex and difficult.

6. It proposes to observe the order of mental growth, the order in harmony with the mind's development, and the evolution of civilization in all countries.

7. It proposes clearly to place before the student the problems of thought, the great facts of nature and being, before attempting their solution. You cannot solve a problem until you know what the problem is. You cannot account for any event until you have the event to be accounted for.

8. It proposes to give the student early in his course access to French and German, which he so much needs in college, instead of depriving him of such important advantages until near the time of graduation. Thus the literature of these languages is available at an early period.

It is not easy fully to test the value of this movement until after some classes have passed through the entire course, including both the preparatory and college work. Students who have prepared on the old and common plan do not get the full benefit of the system, and they are classified on the basis of the extent of work done, and consequently according to the usual requirements for entrance.

LIBRARY.

In connection with our centenary movement, we are seeking to strengthen our library. During the year we have procured 850 volumes, the most of them being books which have a direct bearing on the work in the different departments of instruction.

BIOLOGICAL LABORATORY.

The institution has purchased several fine microscopes, and is now able to carry forward its work in Biology, Botany, etc., by the aid of twenty or more of these instruments. A good deal of interest is awakened in this branch of study.

ASTRONOMICAL OBSERVATORY.

Since my last report the instruments for the Observatory have been mounted. They consist of the following:

1. A refractor of eight inches clear aperture, manufactured by Alvan Clark & Sons, and supplied with circles, driving-clock, micrometer, etc., etc.

2. A transit circle, with four-inch telescope, and circles of 16 inches diameter, read by two micrometer-microscopes to single seconds.

3. An astronomical clock, with battery connections and break circuit attachment.

4. A chronograph of latest style, supplied with Saegmuller's maintaining power.

COLLEGE PROPERTY AND ENDOWMENTS.

The value of the property of the College is about $100,000. This consists of the Campus, the Buildings, the Astronomical Observatory, Library, Museum, Physical and Chemical Apparatus, and Musical Instruments with which the Conservatory is provided.

The endowment consists of:

Productive funds	$170,000
Real estate and other property not yet converted into money	100,000
Total	$270,000
To this add the value of College premises, buildings, etc	100,000
Making an aggregate of	$370,000

In addition to the foregoing, provision has been made for the endowment of a Professorship to be called the Samuel O. Knapp Professorship of Geology and Mineralogy. The Alumni have inaugurated a movement to endow an Alumni chair, and have subscribed, up to the time of writing this report, $4,000.

All of which is respectfully submitted.

L. R. FISKE,
President.

BATTLE CREEK COLLEGE.

REPORT OF THE PRESIDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—There are many features concerning the educational interests of our College that might be mentioned as encouraging.

During the past year the curriculum of study has been changed so that there are now full Classical, Scientific, and English courses, whereas, in the previous year, there were only meager Scientific and English courses.

The attendance has been good, and the grade of students as to scholarship much better than the previous year.

There were in all four hundred and eleven students enrolled, coming from twenty-one states and three foreign countries. One hundred and thirty-three came from west of the Mississippi river.

The buildings have been crowded to such an extent that it was deemed advisable at the last meeting of the stockholders of the society to raise by subscription fifty thousand dollars ($50,000) for the purpose of enlarging the facilities.

The new department of Manual Training has been more fully developed. There are classes in millinery, dressmaking, household economy, printing, book-binding, and carpentry. Some of these classes have been large, having thirty-five or forty in attendance.

The grade of school work is as good as it ever has been, and the outlook for the future is excellent.

The number of professors, tutors, and instructors is twenty-four.

President, Wm. Warren Prescott.
Uriah Smith, Biblical Exegesis.
Eli Burgess Miller, Biblical History and Literature.
Chas. C. Lewis, English Language and Literature.
Ferris S. Hafford, Mathematics.
Linda Tuck, Greek and Latin.
John D. Hare, Natural Science.
Ida E. Rankin, Preceptress.
August Kunz, German Language.
Mrs. W. C. Sisley, Missionary Department.
Mrs. E. B. Miller, English Language.
August Swedberg, Swedish Language.
Niels Clausen, Danish Language.
Edwin Barnes, Vocal and Instrumental Music.
Mrs. A. Kirby, Primary and Intermediate Department.
Mrs. C. C. Lewis, Intermediate Department.

James Loughhead, Common Branches.
W. P. Butler, Phonography.
Mrs. J. H. Kellogg, Household Economy.
Mrs. Rachel Perkins, Millinery.
Mary Hornaday, Dressmaking.
Burton O. Carr, Carpentry.
J. W. Robinson, Turning and Scroll Sawing.
B. H. Welch, Printing.

COURSES.

The courses of instruction are the usual Classical and Scientific courses of four years each, with their preparatory courses, the Classical Preparatory of three years, and the Scientific Preparatory of two years; an English course of three years, with its preparatory course of two years; a special Biblical course of four years; a Primary and Intermediate course of six years; and a Manual Training course connected with the regular school work.

TEXT-BOOKS.

The books of instruction used are,—
Webb's and Monroe's series of Readers.
Hall's, Harper's, and Monteith's series of Geographies.
Olney's and Colburn's series of Arithmetics.
Payson, Dunton and Scribner's Penmanship.
Krusi's Drawing.
Bell's English Grammar.
Hill's Rhetoric and Logic.
Shaw's English Literature.
Wells's University Algebra.
Wentworth's Geometry.
Olney's Higher Mathematics.
Gray's School and Field-book in Botany.
Martin's Physiology.
Packard's Zoölogy.
Avery's Philosophy and Chemistry.
Newcomb and Holden's Astronomy.
Anderson's U. S. History.
Green's English History.
Anderson's General History.
Smith's Biblical and Ecclesiastical History.
Rawlinson's Ancient History.
Taylor's German History.
Leighton's Roman History.
White's History of Greece.
Kurtz's Church History.
D'Aubigne's History of the Reformation.
Young's Civil Government.
Bryant's Book-keeping.
Raymond's Elocution.
Harkness's Latin Grammar, Cæsar, and Cicero.
Jones's First Lessons.
Frieze's Virgil.
Allen and Greenough's Latin Prose.

Harper's Horace.
Lincoln's Livy.
Hurst's Seneca.
Frieze's Quintilian.
Hadley's Greek Grammar.
Leighton's First Greek Lessons.
Jones and Boise's Exercises in Greek Prose Composition.
White and Goodwin's Xenophon's Anabasis.
Greenfield's Greek Testament.
Mather's Herodotus and Thucydides.
Boise's Homer.
Boise's Greek Syntax.
D'Ooge's Demosthenes De Corona.
Otto's German.
Fasquelle's French.
Hopkins's Evidences of Christianity.
Chadbourne's Natural Theology.
Haven's Mental Science.
Wayland's Moral Science.

There is quite a large number of books, not mentioned in this list, that are used as books of reference.

The value of the resources of the College, according to the Treasurer's report at the annual session for Aug. 1, 1885, was $65,611.94; bills payable, $19,289; present worth, $46,322.94; net gain for the year, $5,642.31. Received during the year on shares $4,442, and on donations $2,697.49. The amount of shares taken and paid, up to July 1, 1885, was $57,980.

The number of students in each class is as follows:

Reading	111
Spelling	46
Writing	71
Drawing	46
Arithmetic	110
Chemistry	5
Physiology	34
Algebra	41
Book-keeping	15
Geometry	12
Latin	9
Greek	10
English Literature	4
Rhetoric	15
History	31
Grammar	206
Bible	151
Geography	51
German	27
Danish	4
Lectures	62
Natural Philosophy	15
Missionary	56

A large share of the students are doing preparatory work.

Respectfully submitted,

WM. W. PRESCOTT,
President.

DETROIT COLLEGE.

REPORT OF PRESIDENT.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—In compliance with the laws of the State of Michigan, I have the honor to submit the following report of the condition of Detroit College for the session ending June 24, 1885:

The officers of the institution for the past year were as follows:

BOARD OF TRUSTEES.

Rev. J. G. Walshe, S. J., President.
Rev. M. P. Dowling, S. J., Secretary.
Rev. D. Niederkorn, S. J., Treasurer.
Rev. J. P. Frieden, S. J.
Rev. E. D. Kelly, S. J.

FACULTY.

Rev. J. G. Walshe, S. J., President.

Rev. J. P. Frieden, S. J., Vice-President and Prefect of Studies.

Rev. E. D. Kelly, S. J., Professor of Natural Sciences and Higher Mathematics.

Rev. M. P. Dowling, S. J., Poetry, Professor of English and Latin Literature.

Mr. B. J. Otting, S. J., Professor of Humanities, Elocution and German.

Mr. J. J. Donoher, S. J., Mr. T. F. Brown, S. J., Mr. M. Eicher, S. J., Instructors in the Academic Department.

Mr. W. L. Hornsby, S. J., Mr. J. H. Meuffels, S. J., Instructors in the Commercial Branches, French.

Rev. C. B. Sullivan, S. J., Instructor in the Elementary Department.

The Detroit College, now in the eighth year of its existence, was incorporated April 27, 1881, according to the general law of the State of Michigan, with power to grant such literary honors or confer such degrees as are usually conferred by similar colleges and institutions of learning in the United States.

The course of studies is the same as that pursued in all Jesuit Colleges. It is modeled on the peculiar "Ratio Studiorum" of the Society of Jesus: embracing the doctrines and evidences of the Catholic Religion, Logic, Metaphysics, Ethics, Astronomy, Natural Philosophy, Chemistry, Mathematics, Rhetoric, Composition, Elocution, History, Geography, Bookkeeping, Arithmetic, the Latin, Greek, English, French and German Languages.

The course of studies is divided into three departments: the Scientific-Collegiate, the Academic and the Commercial. The Scientific-Collegiate Department comprises four classes: Philosophy, Rhetoric, Poetry, Humanities, which answer respectively to the Senior, Junior, Sophomore and Freshman classes of other colleges. Diplomas are granted only to those students of this department who have attended the lectures in the Sciences for at least three sessions, and who have passed a satisfactory examination in Chemistry, Natural Philosophy and the Higher Mathematics, as well as in the ordinary branches of a Collegiate Course. Students who fail in the Scientific Examination, graduate only with secondary honors. The Academic Department is a three years' course preparatory to the Scientific-Collegiate, and corresponds to the high schools of our country. It aims at imparting a thorough Latin, Greek and English ante-collegiate instruction, together with a comprehensive knowledge of Physical Geography, Elementary Mathematics, Book-keeping and History. The Commercial Course embraces all the branches of a good English education. It is completed in four years, and prepares students for business or commercial pursuits. A class of rudiments for young students unqualified to enter the lower classes of the Academic or Commercial courses has been opened to supply the necessary preparation.

Those who complete the Scientific-Collegiate Course receive the degree of Bachelor of Arts. They can afterwards obtain the degree of Master of Arts by devoting one year more to the study of Philosophy, or two years to any of the learned professions, provided that the Board of Trustees be satisfied with their proficiency and their moral conduct.

The class standing and progress of each student is ascertained by a system of monthly competition and by examination. There are two examinations of all the classes every year—one at the end of January and the other at the end of June. In each of the semi-annual examinations the several classes are examined in all the branches studied during the previous half year. Any student failing in the January examinations descends to a lower class, unless he makes up the deficiency within a specified time, besides keeping up with the class in its regular work. Failure in the June examinations debars a student from advancement to a higher class. Students are promoted during the session when, by successful efforts, they have fitted themselves for a higher class; and such promotion is held to be equivalent to the honors of the previous class.

For the formation of a thorough Christian character, as well as for the maintaining of order and discipline, without which good results are not attainable, strict obedience, assiduous application and blameless conduct are required of every student. Any serious fault regarding these essential points renders the offender liable to effective correction, and even to dismissal, if this be deemed necessary by the Faculty.

Several times a year reports are sent to the parents or guardians of the students, to inform them of the conduct and improvement of their sons or wards.

The college has been steadily growing in favor with the community, as is evidenced by the constantly increasing attendance and other marks of approval. Whilst the records of the session of 1881-82 indicate an attendance of 157 students, the session of 1882-83 counted 186, the session of 1883-84 raised the number of students to 217, and the last session (1884-85) records 228. Of these, 136 were in the Scientific-Collegiate and Academic, 60 in the Commercial, and 32 in the Preparatory Department.

The number of students having increased so rapidly, it was found necessary to secure further accommodations. Accordingly a house upon the north side of Jefferson avenue, almost directly opposite the original building, was purchased last January, and fitted up for the use of the Scientific-Collegiate Department. Through the kindness of generous friends, the cabinet of scientific instruments has been notably enlarged, extensive additions have been made to the Library, and quite a number of donations has been received for a Museum.

Besides the college library, the faculty have succeeded in establishing a students' library, at the exclusive disposition of the students. This library possesses a handsome number of select works in every department of English literature. The object of the institution in this is to encourage good and useful reading, and to counteract the moral and intellectual evils wrought by a too promiscuous, trashy and pernicious literature. During the past year the students and their friends have added several new volumes to the library.

The Philomathic Society has been organized among the students of the Scientific-Collegiate Department, to foster a taste for eloquence and literature. Its members meet once a week to exercise themselves in dramatic reading and extemporaneous debate. Carefully prepared essays on historical subjects are read and discussed twice a month. During the past year special attention was paid to the history of the Anglo-Saxons.

An interesting feature of last year's class work was the competition for gold medals, donated by leading citizens of Detroit. One of the medals was offered for the best historical or literary essay on a given subject; another, for the best scientific essay; a third, for the clearest exposition of some point of Catholic doctrine; and the fourth, for the most finished elocution. Two of these medals have been founded by two generous patrons of the college, and their example has proved an incentive to the emulation of others, who have kindly offered other medals for the following session.

Respectfully submitted,
J. P. FRIEDEN, S. J.,
President.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—I feel a little hesitation in making a report for the public eye of an institution differing in so many respects from those I have been connected with. I fear that on the first visit that which is new and strange may occupy too much of a visitor's attention.

On entering each room the pupils rose quietly in their places, bowed to the visitors, and at a sign from the conducting Father, seated themselves and resumed their work. The same was repeated, with a pleasant " Good morning," as we left the room.

While this custom has its objections—as compared with the turning to see a visitor, the bold stare or general tittering that greets visitors in many of our schools—the contrast is a pleasing one.

The work done in the different classes was of a high order, especially that in Latin and Greek.

Another marked feature of the College is the work done in Oratory. Students were called out upon a moment's notice to give exhibitions of drill in this branch, and in each instance acquitted themselves well.

Of the courtesy shown by those in charge I need not speak. The day spent in visiting the College was an interesting and profitable one.

Respectfully submitted,

W. H. CHEEVER,
Visitor.

DETROIT HOME AND DAY SCHOOL.

REPORT OF SECRETARY.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—I herewith submit to you, in compliance with the enclosed circular, a report of the condition of the Detroit Home and Day School.

1. The condition of the educational interests of the institution was never as good as during the current year. It is most thoroughly equipped with competent teachers in every department, who are doing better work than ever before.

2. The list of Instructors is as follows:

Ella M. Liggett, A.B., Mathematics and English Literature.
Madame Marie de Zielinska, French.
Ella McCaleb, A.B., Natural Sciences.
Emma Carhartt, History.
Susan Coleman, A.B.,* Mathematics.
Marienne Bary, Latin and Greek.
Lilian A. Mercur, German.
Adelaide Driscoll, English Branches.
Mrs. A. B. Allen, Mathematics.
Kate Flynn, Penmanship and Spelling.
Helen E. Roby, Drawing and Painting.
Mrs. A. W. Livermore, Lecturer on English Literature.
Benj. F. Comfort, Lecturer on Physics.
Nettie G. Thayer,* Principal's Assistant, and Director of Study Hall.
Nan C. Wardle, A. B., Successor to Miss Thayer.
Jeannette Liggett, M. F. Wood, Primary Department.

3. Number of pupils in the several departments.

NUMBER OF STUDENTS ENROLLED 1884-85.

Primary Department:		
Girls	42	
Boys	29—	71
Preparatory:		
Girls	66	
Boys	31—	97
Collegiate:		
Girls	51	
Boys	9—	60

---

* Resigned Feb. 2, 1885.

Unclassified	19
Taking Special Studies	5
Total	252
Resident Pupils	14
In the School of Music	225

4. COURSE OF STUDY.

The course of study extends over a period of twelve years, and includes liberal and thorough instruction in the Ancient and Modern Languages, Mathematics, History, Literature, and the Natural Sciences. The Classical Course is arranged with reference to preparation for entering college. Each pupil is carefully graded, and only allowed to pass from one grade to the next higher after reaching the approved standard.

PRIMARY COURSE.

(Completed in four years.)

Arithmetic—Mental and Practical, to Factoring.
Introductory Geography.
Language Lessons.
Oral Lessons in the Natural Sciences.
Reading, Spelling, Penmanship.
Calisthenics.
Vocal Music.

PREPARATORY COURSE.

(Completed in four years.)

Arithmetic—Factoring, Common and Decimal Fractions, Analysis, Denominate Numbers, and Percentage.
Algebra—Elementary.
Geography.
English Composition.
History of the United States.
Readings from English History.
Reading—Selections of Prose and Poetry from the best English and American authors.
French, German, or Latin.
Spelling and Defining.
Penmanship.

COLLEGIATE COURSE.

(Completed in four years.)

Mathematics—Arithmetic completed, Algebra, Geometry, Trigonometry (elective.)

Natural Sciences—Physical Geography, Physiology, Botany, Chemistry, Geology, Physics, Astronomy.

English—Analysis and Syntax, Rhetoric, English Literature, Civil Government, Logic.

Languages—French, German, Latin, Greek.

History—English, French, Mediæval, Roman, Grecian, with Mythology—taught first by a series of imaginary travels through the different countries, with a study of the important physical features, the most famous cities, buildings and art treasures of each, and the people and events associated with them. Later, the most interesting periods are taken up in detail in connection with the literature of the time.

FINANCIAL.

The value of property in real estate	$42,000
The value of personal from six to eight thousand dollars	8,000
The stock subscribed	42,000
The stock paid up	33,000
The fixtures and furnishings all paid for	8,000

The institution is on a safe financial basis. Its income from tuition is fully adequate to meet expenses and something more.

Respectfully submitted,

J. D. LIGGETT,
Secretary.

HILLSDALE COLLEGE.

REPORT OF PRESIDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—In compliance with the requirements of the law and the instruction of your circular I have the pleasure of reporting "the condition of the educational interests" of Hillsdale College. This institution was not established and is not sustained for sectarian purposes, but for higher educational purposes under Christian influences. There is no change in its purpose nor in the conviction of its importance. The numbers in attendance, the enthusiasm and general character of the students, the general efficiency and self-sacrificing spirit of the faculty, and the general interest and patronage of friends justifies the expectation of continued success.

The Board of Trustees consists of thirty-five members, elected for five years, but so classified that seven are elected each year. A Prudential Committee of ten members constitute an Executive Board.

The Board of Instruction consists of twenty-four members, as follows:

IN THE ACADEMIC DEPARTMENT.

Rev. Ransom Dunn, D. D., President and Professor of Mental, Moral and Political Philosophy.
Daniel Moses Fisk, A. M., Professor of Chemistry, Biology and Geology.
Rev. John Scott Copp, A. M., Alumni Professor of Logic, Belles-lettres and German.
Arthur Edwin Haynes, M. Ph., Fowler Professor of Mathematics and Physics.
Kingsbury Bachelder, A. M., Waldron Professor of the Latin Language and Literature.
James F. Parsons, A. M., Professor of the Greek Language and Literature.
Miss Cassie Alda Reamer, A. M., Principal of the Ladies' Department and Professor of French.
Frank Smith, Instructor in Mathematics.
Clark Lincoln Herron, Tutor in Mathematics.
Alexander Hamilton Hiller, Tutor in Grammar.
Stephen Benjamin Harvey, Tutor in German.
Emma Louise Ellis, Assistant in Microscopy.
Cressy Livingston Wilbur, Tutor in Chemistry.
Carrie Gillespie Durgin, Tutor in Ancient History.
William Marvin Spears, Tutor in English Grammar.

FACULTY OF THE THEOLOGICAL DEPARTMENT.

Rev. Charles Densmore Dudley, A. M., Burr Professor of Systematic Theology.
Rev. Ashman Thompson Salley, A. M., Professor of Sacred Literature.
——— ——— Marks, Professor of Ecclesiastical History and Homiletics.

FACULTY OF THE MUSIC DEPARTMENT.

Melville Warren Chase, Professor of Instrumental Music.
Alvah Graves, Instructor in Vocal Music.

FACULTY OF THE ART DEPARTMENT.

George Balthazar Gardner, Professor of Painting and Drawing.
Ada M. Gardner, Instructor of Water Colors and Crayon.

FACULTY OF THE COMMERCIAL DEPARTMENT.

Alexander Campbell Rideout, LL. D., Principal of Commercial Department and Professor of Political Economy.
Warren Allen Drake, A. M., Professor of Commercial Law, Book-keeping and Penmanship.
Henry T. Benton, Instructor in Penmanship.

Hereafter the Scientific and Philosophical courses are to be united, furnishing two regular courses of four years each: the *Classical* and *Scientific* and *Philosophical*. For the former, three years of preparation, besides the common school studies; and for the latter, three years, including the higher common school branches, are required.

The degrees of A. B. and Ph. B. are given respectively upon the completion of these courses, and a diploma without a degree is given upon the completion of a four years' Normal course.

Besides the College proper, with its preparatory departments, there is the Theological Department, the Music Department, Art Department and the Commercial School.

Of students there were in June, 1885:

Graduates with degrees	22
Graduates with diplomas merely	3
Juniors	22
Sophomores	40
Freshmen	74
Preparatory	133
Normal and English	119
Theological Department	37
Music Department	69
Art Department	88
Commercial Department	173
Total	780
Deducting names entered more than once	150
Attendance	630

The property, including the campus of 25 acres, six commodious buildings, furniture, apparatus, etc., is worth about $150,000. A library of 8,000 volumes, a good chemical laboratory, with fixtures and apparatus, a general and biological museum, with a full supply of microscopes and geological and botanical specimens, furnish abundant helps for undergraduates.

Over $12,000 have been added to the endowment within the year of 1885. Ten thousand dollars by Rev. S. F. Smith and his wife, Mrs. Mary Smith, for the endowment of a Professor of Christian Metaphysics. There is now $150,000 "actually paid in" for endowment, besides $50,000 of doubtful pledges and notes, and the College is *free from debt*. This amount is far too small for the number of teachers and the expenses necessary, but more is expected. The college year embraces 38 weeks. The first term commences upon the second Tuesday of September, and continues 15 weeks. The second term commences the first Tuesday after the first day of January, and continues 12 weeks. After a vacation of one week, the spring term continues until the time of annual commencement, the third Thursday of June.

Respectfully submitted,

R. DUNN,
President.

The courses of study pursued and the books of instruction used are shown by the following list, as taken from the catalogue:

I. CLASSICAL COURSE.

The studies required for the Freshman Class are: The common English branches; Latin Grammar, including Prosody; Cæsar, four books; Cicero, six orations; Virgil's Æneid, six books; Latin Prose Composition; Greek Grammar and Lessons; Xenophon's Anabasis, three books; Greek Prose Composition; Algebra, to Part III., Olney's University; Plane Geometry; Composition and Rhetoric; United States History; Ancient History; Natural Philosophy, and Civil Government.

Freshman Year.

Fall Term.—Livy—Chase and Stewart. Iliad—Keep. Solid Geometry—Olney. English Classics.

Winter Term.—De Amicitia—Chase and Stewart. Greek Selections—Fernald. University Algebra, Part III—Olney. English Classics.

Spring Term.—Horace—Chase and Stewart. Greek Selections—Fernald. Trigonometry—Olney. English Classics.

Sophomore Year.

Fall Term.—Demosthenes—Tyler. General Geometry or French. Inorganic Chemistry—Syllabus. English Classics.

Winter Term.—Tacitus—Germania and Agricola or Juvenal. Calculus—Elective with French or Apologia. Organic Chemistry—Syllabus and Lectures. English Classics.

Spring Term.—Antigone—Woolsey. Calculus—French or Gorgias. Botany—Syllabus with Laboratory Practice and Microscopy. English Classics.

Junior Year.

Fall Term.—German Grammar—Whitney. Mechanics—Peck. Comparative Zoölogy—Packard, with Laboratory Practice and Microscopy. English Classics.

Winter Term.—German Reader—Whitney. Physics—Ganot. Human Physiology—Lectures, with Dissection and Microscopy. English Classics, German Prose—Boisen.

Spring Term.—Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Astronomy—Snell's Olmsted.

Senior Year.

Fall Term.—Intellectual Philosophy — Porter. Logic — Jevons. Rhetoric--Hill. English Literature—Welsh. Mediæval History—Lectures.

Winter Term.—Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Political Economy—Perry. Speculative Philosophy—Lectures. Elective with Philology—Whitney.

Spring Term.—Moral Philosophy—Hopkins. Butler's Analogy. Evidences of Christianity—Hopkins. Geology—Le Conte.

English Classics are taught once per week during the Course.

II. PHILOSOPHICAL COURSE.

The studies required for the Freshman Class are: The common English branches Latin Grammar; Cæsar, four books; Cicero, two orations; Latin Prose Composition; Algebra, to Part III., Olney's Univ., Plane Geometry; Composition and Rhetoric; Civil Government; U. S. History; Ancient History; and Natural Philosophy. Instead of Latin here required, the student may take the Greek required for admission to the Freshman Year of the Classical Course.

Freshman Year.

Fall Term.—Cicero (or Iliad.) Solid Geometry—Olney. French Grammar.

Winter Term.—1st Virgil or Greek Selections. University Algebra, Part III.—Olney. French.

Spring Term.—2d Virgil or Greek Selections. Trigonometry—Olney. French.

Sophomore Year.

Fall Term.—General Geometry—Olney. Inorganic Chemistry—Syllabus. Whitney's German Grammar, Latin or Greek.

Winter Term.—Calculus—Olney. Organic Chemistry—Lectures. Whitney's German Reader, Latin or Greek. Qualitative Analysis—Optional.

Spring Term.—Calculus—Olney. Botany—Lectures, with Laboratory Practice and Microscopy. Boisen's German Prose, Latin or Greek.

Junior Year.

Fall Term.—Mechanics—Peck. Comparative Zoölogy—Packard. Laboratory Practice. Gœthe's Gœtz—Elective with Latin or Greek.

Winter Term.—Schiller's Historical Sketches—Elective with Latin or Greek. Physics—Ganot. Human Physiology—Lectures with Dissections.

Spring Term. — Logic — Jevons. Rhetoric — Hill. English Literature — Welsh. Astronomy—Snell's Olmsted. Schiller's Wilhelm Tell—Elective with Latin or Greek.

Senior Year.

Fall Term. — Intellectual Philosophy — Porter. Logic — Jevons. Rhetoric — Hill. English Literature—Welsh. Mediæval History—Lecture.

Winter Term.—Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Political Economy — Perry. Speculative Philosophy — Lectures. Elective with Philology — Whitney.

Spring Term.—Moral Philosopy—Hopkins. Butler's Analogy. Evidences of Christianity—Hopkins. Geology—Le Conte.

III. SCIENTIFIC COURSE.

Candidates for the Freshman Class are examined in the Common English branches; one year of Latin or Greek; one year of French; Composition and Rhetoric; Civil Government; Natural Philosophy; United States History; Algebra, to Part III., Olney's University, and Plane Geometry.

First Year.

Fall Term.—German Grammar—Whitney. Inorganic Chemistry—Lectures. Solid Geometry—Olney.

Winter Term.—German Reader—Whitney. Organic Chemistry—Lectures. Algebra, Part III.—Olney.

Spring Term.—German Prose—Boisen. Botany—Lectures—Laboratory Practice and Microscopy. Trigonometry—Olney.

Second Year.

Fall Term.—Modern History—Lectures. Zoölogy—Packard—Laboratory Practice and Microscopy. General Geometry—Olney.

Winter Term.—Speculative Philosophy—Lectures, or Philology—Whitney. Physiology—Lectures. Calculus—Olney.

Spring Term.—Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Calculus—Olney. Geology—Le Conte.

Third Year.

Fall Term.—Intellectual Philosophy—Porter. Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Mechanics—Peck.

Winter Term.—Political Economy—Perry. Logic—Jevons. Rhetoric—Hill. English Literature—Welsh. Physics—Ganot.

Spring Term.—Moral Philosophy—Hopkins. Evidences of Christianity—Hopkins. Butler's Analogy—Malcom. Astronomy—Snell's Olmsted.

EXAMINATIONS.

Examinations are required on the completion of every study. A term rank of 7 on a scale of 10 will admit one to an examination for promotion.

NORMAL COURSE.

First Year.

Fall Term.—English Grammar. Arithmetic. Reading and Orthography. Lectures on Teaching.

Winter Term.—English Grammar—continued. Advanced Arithmetic. Reading and Orthography. Geography.

Spring Term.—English Grammar—completed. Vocal Music. Penmanship. Reading and Orthography.

Second Year.

Fall Term.—Composition and Rhetoric. United States History. First Principles of Algebra. Lectures on Teaching,

Winter Term.—Book-keeping. Free Hand Drawing. University Algebra—Part I. Reading.

Spring Term.—Civil Government. Sketching from Nature. University Algebra—Part II. Reading.

Third Year.

Fall Term.—Inorganic Chemistry. Physical Geography. Mediæval History. Lectures on Teaching.

Winter Term.—Organic Chemistry. Elementary Physics. English History.

Spring Term.—Botany—Preparation of Herbaria. English Literature. Plane Geometry.

Fourth Year.

Fall Term.—Zoölogy—with Museum Work. Advanced Rhetoric. Mental Philosophy.

Winter Term.—Human Anatomy and Physiology. Logic. Political Science.

Spring Term.—Geology. Principles of Teaching. Moral Philosophy.

THEOLOGICAL DEPARTMENT.

TERMS OF ADMISSION.

Candidates for admission to this Department must furnish evidence of good standing in some Christian church, and must be properly qualified to pursue the studies with profit.

Those who have received the degree of A. B. will be admitted to the Full Theological Course without examination. Other candidates for this course must give evidence of proficiency in the following studies: Common English branches, Composition and Rhetoric, Natural Philosophy, Physiology, Chemistry, Geology, Astronomy, Logic, Rhetoric, Mental Philosophy, Moral Philosophy, Butler's Analogy, English Literature, and Greek two years.

Those who enter the English Course must be prepared in English Grammar, Composition and Rhetoric, Geography, Arithmetic, and History of the United States.

Those who have only a Common School Education should usually spend not less than three years in preparation for the Full Theological Course. Students of the English Course may study the Greek and Hebrew, so far as they may be able, under direction of the Faculty.

Any person who does not wish to enter either course of study may, on advising with the Faculty, pursue any studies taught in the school.

COURSE OF INSTRUCTION.

JUNIOR YEAR.—FULL COURSE.

Greek Exegesis.

New Testament Grammar.

Lectures on the Origin and Nature of New Testament Greek and kindred topics. Essays by the class on questions of Geography, Biography, etc.

Exegesis of select portions of the New Testament.

Hebrew.

Hebrew Grammar, and Exegesis of the Old Testament.

ENGLISH COURSE.

Mental and Moral Philosophy.
Logic and Rhetoric.
Butler's Analogy and Natural Theology.
Evidences of Christianity.
English Literature.

MIDDLE YEAR.

Lectures on Systematic Theology.

Religion, True and False.
The knowledge of God and of His existence.
The Evidences of Christianity and the Inspiration of the Scriptures.
The Attributes, Works and Government of God, Unity and Trinity.
Free Agency, Sin and Depravity.
The Incarnation, the Person of Christ, Atonement and Redemption.
The Holy Spirit, Regeneration and Sanctification.
Repentance, Faith, Prayer and Obedience.
The Law, the Church, the Ordinances, the Sabbath, and the Ministry.
The Resurrection, the Judgment and the Future State.

Class Work.—Regular Review of the Lectures, Reading of Assigned Authors on Each Subject, and Preparation of Essays.

The Canon.

History of Old Testament Canon.
History of New Testament Canon.

Hebrew.

Exegesis of the Old Testament twice a week throughout the year.

SENIOR YEAR.

Lectures on Pastoral Theology and Homiletics.

Appointment, Mission, and qualifications of the Christian Minister.
Pastoral duties in the Study, Family and Prayer meetings.
Revivals, Special Labors and Ecclesiastical Relations.
The Nature of Preaching, the Personality of the Preacher and the Structure of the Sermon.
Rhetoric as Applied to Preaching and Pulpit Elocution.

Class Work.—Essays on Assigned Topics, Plans of Sermons, Delivery of Sermons, Study and Criticism of Published Sermons, and Exercises in Composition and Delivery.

Ecclesiastical History.

Ancient, Mediæval and Modern Church.
History of Christian Doctrine.
History of Christian Missions.

MUSIC DEPARTMENT.

COURSE OF INSTRUCTION.

By authority of the Board of Trustees, the College will grant diplomas to all such as may complete this course in a satisfactory manner.

The following is an outline of the course of study for the

PIANOFORTE.

First Grade.

Emery, op. 35. Foundation Studies.
Loeschhorn, op. 65. Book 1.
Koehler, op. 151.
Simple pieces for recreation.
Technical exercises from Plaidy, Koehler, etc.

The exercises of this grade are devoted mainly to the acquirement of a pure legato touch, with development of the wrist sufficient to secure a proper execution of the simpler rondo forms, and smaller pieces for recreation. The fingering of major scales is to be learned, with practice in the most common major keys.

Second Grade.

Koehler, op. 50.
Loeschhorn, op. 65. Books 2 and 3.
Czerny, op. 636.
Heller, op. 47.
Emery, op. 37. Fundamental Technique.
Sonatinas by Clementi, Kuhlau, Dussek, Lichner, etc.

In this grade the minor scales are to be learned, and the major scales constantly practiced with accents. Arpeggios on major and minor common chords are to be studied, with accents. A knowledge of the principal modifications of the legato and staccato touch must be acquired.

Third Grade.

Loeschhorn, op. 66. Books 1, 2, and 3.
Heller, op. 46. Books 1 and 2.
Koehler, op. 128. Book 1.
Heller, op. 45.
Bach. Preludes.
Emery. Elements of Harmony, *commenced.*
Easier Sonatas of Clementi, Haydn, Mozart, and Beethoven.
Sonatas and pieces for four hands by Diabelli and others.

Exercises in this grade comprise major and minor scales in octaves, sixths, and tenths, with accents; also four forms of arpeggio, including the chords of the dominant and diminished seventh. Different forms of staccato touch are to be practiced, and special attention will be given to the cantabile style, with appropriate selections for illustration.

Fourth Grade.

Cramer's Etudes, *through the grade.*
Loeschhorn, op. 67.
Heller, op. 16, or Jensen, op. 32.
Bach. Inventions.
Kullak, op. 48. Octave School, *commenced,*
Emery. Elements of Harmony, *completed.*
Mendelssohn's Songs without words.
Sonatas by Mozart and Beethoven.
Selections from Mendelssohn, Chopin, Schumann, etc.
Salon pieces in modern style.
Scales in double thirds and sixths, with practice of octaves and trills.
Arpeggios in extended positions.
Reading at sight four hand arrangements of Haydn's Symphonies and others.

Fifth Grade.

Kullak's Octave School, *completed.*
Selections from Clementi's Gradus ad Parnassum.
" " Moscheles, op. 70, or 73.
" " Chopin, op. 10.

Selections appropriate to this grade from Beethoven, Mendelssohn, Chopin, Weber and others.

Franklin Taylor's "Primer of Pianoforte Playing," for reference, throughout the course.

Pauer's Musical Forms and Filmore's History of Pianoforte Music to be read.

The course in Harmony requires at least four terms for its completion. It is commenced with the Fall term of each year.

Pupils' recitals are held weekly, in which each is expected to participate.

CULTIVATION OF THE VOICE.

The course includes the following studies:
Rondinella, 76. Exercises in Vocalization.
Marchesi. Two Books.
Savinelli. Vocalizes. Two Books.
Nava, op. 21.
Bordogni, Etudes in Bravura.

Mr. A. Graves is the vocal teacher, and gives his whole attention to the art of singing. asses are formed for instruction in reading at sight. No one is here considered a singer who is unable to read music. The system used in elementary classes is the syllable and interval method, giving special attention to the chief tones in the major and minor keys, and the correct treatment of words and syllables.

A complete development of the voice at this college requires from three te five years. While much can be done by those of mature age in one year, it is well for those who wish to secure a fine voice, with the utmost purity of tone, and placed under perfect control, to study at least three years, and, if possible, five. Voices that have been injured may, if possible, be restored by study in this school, as our teacher has had considerable experience with such cases. In addition to singing classes of different grades, a teachers' and conductors' class is maintained, under the personal supervision and direction of the vocal teacher.

Those who are qualified for the study of Oratorios, Masses, and the higher grades of Glee and Church Music, find in the rehearsals of the Beethoven Society opportunity for constant improvement. The library of this society contains a valuable and varied selection of the best choral music, and is one of the largest collections to be found in the State.

ART DEPARTMENT.

In accordance with a resolution passed by the Board of Trustees, at their annual meeting in June, 1883, a course of Instruction in Art, consisting of four years' study, has been arranged, upon satisfactory completion of which the College will grant a diploma to graduates.

The studies of the first year in that course are designed with a view to meeting the wants of teachers in the public schools of our country, and to lay a solid foundation for those who intend to enter the professions of engineering, architecture, designing, etc. Certificates will be given to those who satisfactorily complete this part of the Art course.

COURSE OF INSTRUCTION.

First Year.

Fall Term.—Elementary Principles of Drawing and Perspective.

Winter Term.—Drawing from objects, casts, and nature; perspective continued to oblique.

Spring Term.—Drawing and Sketching from nature and life; oblique perspective.

Second Year.

Sketching in Pencil, Charcoal, and Crayon; India Ink and Water Color painting.

Third Year.

Oil painting from original works, and studies from nature; Charcoal and Crayon drawing; sketching from life and nature.

Fourth Year.

Painting from life and nature exclusively. Charcoal and Crayon studies continued. Lectures on Art and Artists, and the History of Ancient and Modern Art.

A good English Education is necessary to those entering the Art course, in addition to which a knowledge of some of the modern languages and of Latin is desirable, while the history of ancient and modern Art, anatomy, zoölogy, botany, chemistry, geology, and mineralogy should receive the most earnest attention of the Art student.

Energetic and strong students, who devote their whole time to the work, may complete the studies laid down for the first two years in one.

The one year's course in Drawing and Perspective is free to all matriculated students of the College.

Expenses for instruction subsequently, including outlay for material, are about one hundred dollars per year.

Candidates for advanced standing will be examined in the studies preceding the year which they wish to enter, and may thus begin the course at any time, where their previously acquired knowledge entitles them to.

COMMERCIAL AND TELEGRAPHIC DEPARTMENT.

The Course is divided into three divisions, as follows:

FIRST DIVISION.

Day-book. Journal. Ledger. Trial Balance. Analysis. Commercial Law—Clark. Commercial Paper. Commercial Arithmetic—Sadler. Penmanship. Political Economy—Perry.

SECOND DIVISION.

Full Journal. Cash Book. Special Column Journal. Commission Sales Book. Executors and Administrators' Accounts. Consignments. Shipments. Changing Sets of Stock Books from Single to Double Entry. Changing Sets of Partnership Books from Single to Double Entry. Commercial Paper. Correspondence. Commercial Law. Political Economy. Commercial Arithmetic. Penmanship.

THIRD DIVISION.

Compound Company Accounts, Half System. Compound Company Accounts, Whole System. Railroading. Steamboating. Banking. Brokerage. Life Insurance. Fire Insurance. Penmanship. Commercial Arithmetic. Political Economy. Commercial Law.

TELEGRAPHY.

The Course is divided into two divisions, and is accompanied by a course of Lectures embracing the following subjects:

Frictional Electricity. Galvanic or Voltaic Electricity. Magnetism. Systems of Telegraphy. Thermal Electricity. Insulation. Circuits. Conduction. Ærial Telegraphy. Submarine Telegraphy. Telephone. Terrestial Electrical Disturbances. Instruments. Writing (Telegraphic). Checking. Book-keeping (Telegraphic). Railroad Business. Outline of Theoretical Telegraphy. Messages. Penmanship. History and Theory of Telegraph—*Prescott*. Penmanship.

HOPE COLLEGE.

REPORT OF PRESIDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—Hereby I send to you the report of Hope College, at Holland, for the year 1884-85:

THE PRESIDENCY.

Your last report, on page xli, stated that Rev. P. Phelps, D.D., "resigned the past year." He resigned in 1878, since which time Dr. Scott has been acting president. In April, 1884, Rev. John A. De Baun, D. D., of Fonda, N. Y., was elected president, but declined. In April, 1885, Dr. Scott was elected to the vacant presidency, and in June was confirmed by the General Synod of the Reformed Church.

THE COUNCIL.

Rev. Charles Scott, D. D., *ex-officio.*

TERM EXPIRING IN 1886.

J. C. Benham, M. D., Hudson, N. Y.
Rev. John S. Joralmon, Norwood Park, Ill.
Rev. Wm. H. Phraner, Irving Park, Ill.

TERM EXPIRING IN 1887.

Rev. Wm. J. R. Taylor, D. D., Newark, N. J.
Rev. John H. Karsten, Holland, Mich.
Rev. Wm. Moerdyk, S. Holland, Ill.

TERM EXPIRING IN 1888.

Rev. Edward P. Livingston, D. D., Sioux Falls, Dak.
Rev. Thomas W. Jones, Holland, Mich.
Rev. Peter Moerdyke, Grand Rapids, Mich.

TERM EXPIRING IN 1889.

Rev. James F. Zwemer, Waupun, Wis.
Rev. N. M. Dosker, Kalamazoo, Mich.
Rev. Henry E. Dosker, Grand Haven, Mich.

TERM EXPIRING IN 1890.

Arend Visscher, Esq., Holland, Mich.
Rev. Peter Lepeltak, Overisel, Mich.
Rev. Dirk Broek, Holland, Mich.

TERM EXPIRING IN 1891.

Isaac Cappon, Esq., Holland, Mich.
Rev. Ale Buursma, Orange City, Ia.
Rev. Lawrence Dykstra, Orange City, Ia.

OFFICERS OF THE COUNCIL.

President—Rev. P. Lepeltak.
Vice President—Rev. W. Moerdyk.
Secretary—Rev. P. Moerdyke.
Treasurer—Isaac Cappon.
Executive Committee—President Chas. Scott, I. Cappon, and Revs. Dirk Broek, T. W. Jones, and P. Moerdyke.

The Council meets regularly in April and in June. The Executive Committee meets every month, and exercises many of the duties of the Council *ad interim*.

ACADEMIC DEPARTMENT.

1. The Faculty, and 2. Course of Study.

These are the same as in 1883-84, and may be found on pages 150 and 151 of your last report. The President, however, gave instruction in Mental and Moral Philosophy and in Christian Evidences.

3. Students.

Seniors, 6; Juniors, 6; Sophomores, 10; Freshmen, 9; Total, 31. Since 1866 the number of graduates receiving the degree of A. B. has been 114. The degree of A. M. is "in course" after three years, provided studies have been continued.

I would repeat the assertion, that while Hope College has no distinct "Scientific Course," it yet gives the usual *Scientific* education as a part of its required curriculum, and the Faculty have become convinced that the best students—the most scholarly and aspiring—are those who avoid a one-sided culture, and pursue the full course, as laid down in our catalogue. In like manner, our best pupils in *English* branches are those who unite with them the Latin and the Greek.

Every year makes it more manifest that the University of Michigan (not designedly of course) is doing much injury to the colleges of the State by the very easy entrance which it accords to those who seek to enter its professional departments. Institutions like Hope College can not retain its students until graduation, because so many whom their parents wish to *educate*, and who should be A. Bs. or S. Bs., are attracted to the University even from the lower classes of the preparatory school, and thus sent forth with "degrees" which indicate no previous culture or scholarship. Can this be called "higher education?" I feel that this abuse should be remedied, if need be, by the Legislature.

PREPARATORY DEPARTMENT.

1. Faculty.

Rev. Charles Scott, D. D., President.
Rev. T. Romeyn Beck, D. D., Greek and Mythology (A. class).

Cornelius Doesburg, A. M., Dutch, French, German, and Drawing.

Wm. A. Shields, A. M., Secretary, English Grammar, Rhetoric, and Composition (A. and B. classes).

Gerrit J. Kollen, A. M., Algebra (A.), Geometry, Natural Philosophy, Astronomy, and Didactics.

Henry Boers, A. M., Latin, Greek and Roman History, Arithmetic, and Physiology.

John H. Kleinheksel, Jr., A. M., Greek (B.), Algebra (B.), English Grammar (C.), Book-keeping, Geography, U. S. History, and Civil Government.

Philip T. Phelps, A. B., Reading, Orthography, Penmanship, English Grammar (D.), English History, and Botany.

Rev. N. M. Steffens, D. D., Religious Instruction (A. and B.)

Rev. John H. Karsten, A. M., Religious Instruction (C. and D.)

Prof. G. C. Shepherd, Vocal Music and the Voice.

2. *Students.*

A. class, 13; B. class, 27; C. class, 34; D. class, 38; unclassified, 3; total, 115; hence the whole number in the Institution is 146.

3. *Course of Study.*

This has not been changed. See last report, pages 152 and 153.

Nearly all the Grammar-school students purpose a full classical course; of the 34 in the C. class, 31 have entered upon the study of Latin; still, as a fact, a majority do not enter the Academic Department. Many of them become teachers.

THEOLOGICAL DEPARTMENT.

This department, which had been suspended in 1877, was re-opened Dec. 5, 1884; at which date a Professorship of $30,000 had been completed and paid in cash.

Faculty.

Rev. N. M. Steffens, D. D., Professor of Didactic and Polemic Theology.

Rev. T. R. Beck, D. D., Synodical Lector in Biblical Languages and Exegesis.

Prof. C. Scott, D. D., Synodical Lector in Church History and Government.

The regular Lectors not being able to serve, their places were supplied as follows:

Prof. N. M. Steffens, D. D., Instructor in Hebrew.

Rev. Peter Moerdyk, A. M., Instructor in Greek and Archæology.

Rev. Henry E. Dosker, A. M., Instructor in Church History.

In June the Lectors, Beck and Scott, resigned to the General Synod. That body also resolved that the Theological Department of Hope College should hereafter be known as the "Western Theological Seminary of the Reformed Church in America."

2. *Students.*

Juniors, 4; Middles, 1. Total, 5.

3. *Course of Study.*

The same as is pursued in the Seminary at New Brunswick, N. J., and practically the same as has been adopted by other Theological Schools.

FINANCES.

1. *The Contingent Fund.*

Receipts.

Balance on hand	$ 272 14
Interest	4,405 91
Students' Fees	1,884 75
Donations	2,861 05
Miscellaneous	36 58
Total	$9,460 43

Expenses.

Salaries	$7,086 71
Council and Treasury	312 81
Grounds and Buildings	823 50
Taxes	590 47
Other Expenses	562 80
Balance on hand	84 14
Total	$9,460 43

2. *Permanent Fund.*

Receipts.

Balance on hand	$ 78 94
From sales of land	410 67
From donations	308 80
Total	$798 41

Contra.

Invested	$722 43
Balance on hand	75 98
Total	$798 41

3. *Investments.*

Mortgages	$ 53,338 54
Professorship of Theology	30,000 00
Unsecured notes	9,601 00
In "De Hope" office	9,000 00
Total	$101,939 54

The income of the Theological Professorship is paid directly to the Professor, and is not included in the "Contingent Fund" above. The notes and De Hope yield but little income.

4. *Liabilities.*

These are only	$1,000 00

5. *Library.*

Received for Library	$205 44
Expended for books and papers	108 30
Balance on hand	97 14
Bound books received	128
Pamphlets and periodicals	844
Books in the Library	6,363

No charge is made for the use of the Library and Reading Room.

DE HOPE

continues in charge of Rev. John H. Karsten. The circulation is stated to be over 1,600.

EXPENSES.

The board of student, in families of the city, averages $2.75 per week, including furnished rooms. The fees are five dollars ($5) per term. Thus the *total* cost of an education at Hope College need not exceed $175–$200 a year.

REAL ESTATE.

About three acres of city property belonging to the College has been sold. In the month of June "Charter Hall," used for recitation purposes, was destroyed by an incendiary fire. Efforts were at once begun to raise $15,000 for a new brick or stone building. Money to the amount of $3,100 has been donated for the erection of a President's house, which will be built during the coming year.

CONCLUSION.

Hope College makes slow but sure progress, and will become of increasing value to western Michigan. A large part of its funds has come from the East, and it would be pleasant to feel that donors *in the State* would recognize the usefulness of the institution. And may we not hope that some Board of Visitors will report on the status and work of the school?

Respectfully submitted,
CHARLES SCOTT,
President.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—Two members of the committee appointed to visit Hope College—the third being prevented by business engagements—respectfully submit the following report:

We visited the College the 17th and 18th of June, during the progress of the annual examinations. We attended examinations in the Preparatory department and in the College proper. We take pleasure in reporting that, so far as we could judge, the school is doing excellent work in all its departments, making the best use of its limited facilities. Earnestness and thoroughness, on the part of both instructors and students, were everywhere evident.

Moral and Christian influences predominate. The committee were especially well pleased with the systematic and progressive work in English, commencing in the lowest preparatory and continuing through the College senior year. History, Mathematics, Ancient and Modern Languages receive special attention, and thorough work seemed to be done in them all.

The committee commend the College as worthy hearty support and liberal patronage, and hope that at an early day it may outgrow two years of its preparatory work, leaving that for the public schools, and devote its energies more fully to the higher education.

E. B. FAIRFIELD, JR.,
P. MOERDYKE,
Visitors.

KALAMAZOO COLLEGE.

REPORT OF THE PRESIDENT.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—In compliance with the requirements of law, I herewith submit the annual report of Kalamazoo College for the year ending June 17, 1885:

The following persons constituted the Board of Trustees:

Rev. Samuel Haskell, D. D.
I. L. Hamilton, M. D.
Rev. Asher E. Mather, D. D.
Rev. L. H. Trowbridge.
Rev. Kendall Brooks, D. D.
Chauncey Strong, A. M.
William Bair, Esq.
Rev. George W. Harris, A. M.
Rev. Samuel Graves, D. D.
Howard G. Colman, A. M.
Rev. Theodore Nelson, LL. D.
Rev. Howard B. Taft, A. M.
Rev. Thomas M. Shanafelt, D. D.
Rev. Jay Huntington, A. M.
William L. Eaton, A. M.
Edward Olney, LL. D.
Rev. Zelotes Grenell, D. D.
Daniel Putnam, A. M.
C. C. Bowen, Esq.
Rev. Samuel Brooks, D. D.
Rev. John Donnelly, A. M.
D. A. Waterman, Esq.
J. E. Howard, Esq.
Hon. Moreau S. Crosby, A. M.
Hon. A. H. Wilkinson, A. M.
Rev. J. H. Dudley.
Rev. Charles R. Henderson, D. D.
Rev. C. E. Conley, A. M.
Hon. Wm. A. Moore, A. M.
Rev. J. D. Pulis.
G. D. G. Thurston, Esq.
Schuyler Grant, Esq.
Rev. L. Kirtley.
S. George Cook, Esq.
G. E. King, Esq.

Rev. George W. Harris, of Battle Creek, a trustee of the College for many years, died February 8, 1885.

The members of the Faculty and others officers were as follows:

Rev. Kendall Brooks, D. D., President and Professor of Moral and Intellectual Philosophy.
Rev. Samuel Brooks, D. D., Professor of the Latin Language and Literature.
Jabez Montgomery, Ph. D., Professor of the Natural Sciences.
Alexander Hadlock, Ph. M., Professor of Mathematics.
Francis D. Haskell, A. M., Professor of the Greek Language and Literature.
Rev. Ignatz Mueller, Instructor in German.
Miss Marion A. Chase, Instructor in History.
Miss Mary A. Sawtelle, Instructor in French.

Miss Helen M. Brooks, Instructor in Painting and Drawing.
Prof. Samuel Brooks, Librarian.
Rev. Jesse S. Boyden, Financial Secretary.
Mr. Sylvester G. St. John, Janitor.

The number of students for the year, as shown in the calendar was 161; of whom 54 were in the College proper, and 107 in the Preparatory Department. Of these 91 were young men and 70 young women.

COLLEGE COURSES OF STUDY.

There are three courses of instruction, each extending through four years,

1. The Classical Course, leading to the degree of Bachelor of Arts.
2. The Latin-Scientific Course, leading to the degree of Bachelor of Philosophy.
3. The Scientific Course, leading to the degree of Bachelor of Science.

The following schedule includes all the studies, both prescribed and elective, in all the courses. Required studies in the Classical Course are marked (*a*); in the Latin-Scientific Course, (*b*); in the Scientific Course, (*c*). Besides these, each student must select, for each term, a sufficient number of studies to make up, together with those which are required, three daily recitations in addition to his rhetorical exercises. But no student will be allowed to pursue more than three studies at the same time, in addition to his rhetorical work, except by special permission of the Faculty, granted on the student's written request.

In the Latin-Scientific Course, Greek may be substituted for Latin.

FRESHMAN YEAR.

1. *Greek*—Homer's Iliad, Books II-VI. Select Orations of Lysias. Selections from the Greek Historians. (*a*).
2. *Latin*—Cicero de Senectute and de Amicitia. Livy. The Odes of Horace. (*a*) (*b*).
3. *Mathematics*—Olney's Plane and Spherical Trigonometry. Olney's University Algebra, Part III. Olney's Advanced Geometry. (*a*) (*b*) (*c*).
4. *History*—England from the Accession of Henry IV. to the Death of Elizabeth. England during the reign of the Stuarts: also leading events in the history of France and Germany during this period. England from the reign of the Stuarts to the present time. Text-book, Green's History of the English People. (*b*) (*c*).
5. *Biology*—Packard's Zoölogy and Gray's Manual of Botany. This work will be a study of life as manifested in both plants and animals, and will combine text-book and laboratory work. (*c*).

SOPHOMORE YEAR.

1. *Greek and Latin*—The Œdipus Tyrannus, or the Antigone, of Sophocles. Second Term. (*a*). The Satires and Epistles of Horace. Third Term. (*a*) (*b*).
2. *Mathematics*—Olney's General Geometry. First Term. (*a*) (*b*) (*c*). Olney's Calculus. Second Term. (*b*) (*c*). Olney's General Geometry. Third Term. (*c*).
3. *French*—Grammar, Modern French Literature, Corneille and Racine. (*a*).
4. *French*—Literature of the seventeenth and eighteenth centuries: Moliere, Bossuet, Madame de Sevigne, etc., Essays and Dictation. (*c*). In this department the aim is to give the student a practical knowledge of the French language and literature. Special attention is paid to pronunciation, and to the study of the best French authors.
5. *Literature*—Arnold's English Literature. Lectures upon English authors of the nineteenth century, and upon American literature. In this department the students are required to make the text-book a basis of work, and to study the authors carefully for themselves. Lectures are given frequently during the third term by the teacher, and students are required to write essays each term.

The students of each course are required to take Literature the first term, those of the Latin-Scientific and Scientific courses the second term, and those of the Scientific course the third term.

JUNIOR YEAR.

1. *Greek and Latin*—The Prometheus of Æschylus, or one of the Comedies of Aristophanes. (*a*). The Germania and Agricola of Tacitus, or Juvenal. (*a*) (*b*).

2. *German*—Continued through the year. (*b*) (*c*).

3. *Chemistry*—Barker's Chemistry. General Chemistry. First Term. (*a*) (*b*) (*c*). Applied Chemistry. Second Term. (*c*).

4. *Natural Philosophy*—Olmstead's College Philosophy, Kimball's edition. Mechanics. First Term. Physics. Second Term. (*a*) (*b*) (*c*).

5. *Geology*—Dana's Text-book. Third Term. (*a*) (*b*) (*c*).

6. *Surveying*—Schuyler's Surveying. Third Term. (*c*). In surveying the student will have practical work.

SENIOR YEAR.

1. *Greek and Latin*—Demosthenes on the Crown, or Plato's Apology, and selections from the New Testament. First Term. Frieze's Quintilian, or Seneca. Second Term.

2. *Philosophy*—Porter's Intellectual Science. Bascom's Science of Duty. The History of Philosophy. (*a*) (*b*) (*c*).

3. Hill's Natural Sources of Theology and Diman's Theistic Argument. Jevons's Logic. Hopkins's Evidences of Christianity, and Storrs's Divine Origin of Christianity. (*a*) (*b*) (*c*).

4. Loomis's Astronomy. First Term. (*a*) (*b*) (*c*).

5. A. S. Hill's Principles of Rhetoric. Second Term. (*c*).

6. Mill's Political Economy, Laughlin's Edition. Third Term. (*c*).

Rhetorical Exercises are required of all students, as follows:

During the Freshman and Sophomore years, declamations and essays.

During the Junior and Senior years, orations and essays.

PREPARATORY DEPARTMENT.

The Preparatory Department offers three courses of Instruction:

1. The Classical Course.
2. The Latin-Scientific Course.
3. The Scientific Course.

Each of these courses is preparatory to the corresponding course in the College. In the following schedule the studies of the Classical course are designated by (*a*); those of the Latin-Scientific course by (*b*), and those of the Scientific course by (*c*). Greek may be substituted for Latin in the Latin-Scientific course.

First Year.

1. *Latin*—Harkness's Latin Grammar, Jones's First Latin Lessons, four books of Cæsar's Commentaries, Jones's Exercises in Latin Prose Composition. (*a*) (*b*). The work prescribed for this year is equivalent to that usually required for two daily recitations throughout the year, and during a part of the time the class recites twice a day. Students in Latin are therefore expected to take for the first year only one additional study.

2. *Arithmetic*—Wentworth and Hill's Arithmetic. First and Second Terms. (*c*).

3. *Grammar*—Swinton's English Grammar. First and Second Terms. Swinton's English Composition. Third Term. (*c*). D. J. Hill's Elements of Rhetoric. Third Term. (*a*) (*b*) (*c*).

4. Steele's Physiology. First Term. Guyot's Physical Geography. Second Term. (*a*) (*b*) (*c*).

5. Civil Government—Young's Government Class-book. Third Term. (*b*) (*c*).

Second Year.

1. *Greek*—Harkness's First Greek Book, with Hadley and Allen's New Greek Grammar, Xenophon's Anabasis. (*a*).
2. *Latin*—Six Orations of Cicero, and twenty-five hundred lines of Ovid, with special attention to Prosody. (*a*) (*b*).
3. *Algebra*—Olney's Complete Algebra. (*a*) (*b*) (*c*).
4. *History*—Swinton's Outlines of the World's History. (*b*) (*c*).
5. *Natural Philosophy*—Gillet and Rolfe. First and Second Terms. Chemistry. Third Term.

Third Year.

1. *Greek*—Xenophon's Anabasis, with Jones's Exercises in Greek Prose Composition, Smith's Smaller History of Greece, Homer's Iliad, Book I. (*a*).
2. *Latin*—Six books of Virgil's Æneid, and Roman History. By the constant use of wall maps as well by means of a text-book, the student is made familiar with ancient geography. The method of pronunciation in use is the Roman. (*a*) (*b*).
3. *Geometry*—Olney's New Elementary Geometry, Plane and Solid. (*a*) (*b*) (*c*).
4. *French*—French Principia, Part I, French Reader, Dictation, and Grammatical Exercises, Contemporary French Literature. (*b*) (*c*).
5. *Astronomy*—Gillet and Rolfe. First Term. Botany. Gray's Lessons and Manual. Third Term. (*c*).
7. *Book-keeping*—Nichols's Practical Book-keeping. Second Term. (*c*).

Weekly exercises in reading are continued through the three years, and declamations and essays are required each term.

Respectfully submitted,

KENDALL BROOKS,
President.

OLIVET COLLEGE.

REPORT OF THE PRESIDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Dear Sir,—On behalf of the Trustees of Olivet College, I present the annual report touching its condition and prospects. The period covered is the academical year of 1884–5.

The corporation of the College consists of twenty-five members, and is self-perpetuating. Four members are elected annually. The President of the College is *ex-officio* the head of the corporation.

The immediate care of the College is committed to these officers and committees:

Executive Committee—H. Q. Butterfield, O. Hosford, J. L. Daniels, F. L. Reed, A. K. Warren.

Library Committee—H. Q. Butterfield, J. Estabrook.

Secretary and Assistant Treasurer—Geo. W. Keyes.

Treasurer—Henry Fralick.

Financial Agent—Rev. W. B. Williams.

FACULTY.

Rev. Horatio Q. Butterfield, D. D., President, Drury Professor of Mental and Moral Philosophy.

Rev. Henry M. Goodwin, D. D., Professor of English Literature and Art.

Rev. Oramel Hosford, A. M., Stone Professor of Astronomy and Natural Philosophy, and Instructor in Mathematics.

Rev. Joseph L. Daniels, A. M., Parsons Professor of the Greek Language and Literature, and Instructor in German.

Rev. Joseph Estabrook, A. M., Principal of the Normal Department, and Professor of Logic.

Stewart Montgomery, A. M., Professor of Natural Science.

Rev. Jean Frederic Loba, A. M., Professor of Rhetoric, and Instructor in French.

Allen W. Gould, A. M., Rutan Professor of the Latin Language and Literature.

Charles H. Johnson, Professor of Music.

Hamilton King, A. M., Principal of the Preparatory Department.

Mrs. Abba C. Hamilton, Principal of the Ladies' Department.

Miss Cornelia P. Dwight, Instructor in Mathematics and History.

Mrs. Ella M. Kedzie, A. B., Instructor in Painting and Drawing.

Mrs. Frances Goodman, Instructor in Vocal Music.

Miss L. L. Hosford, Teacher of the Piano and Organ.

James Fairman, A. M., Lecturer on Art.

Joseph L. Daniels, A. M., Librarian.

SUMMARY OF STUDENTS FOR 1884-5.

College:		
Classical Course	49	
Scientific Course	20	
Literary Course	46	115
Preparatory:		
Classical Course	46	
Literary Course	18	
Scientific Course	5	69
Normal Course		94
English and Elective		49
Conservatory of Music		63
Art		52
		442
Deduct for names inserted twice		99
Total		843

COURSES OF STUDY.

COLLEGE.

CLASSICAL COURSE.

Freshman Year.

First Term—Livy. History of Rome. Homer's Iliad and Odyssey. Greek Prose Composition. Greek Grammar. Algebra completed.

Second Term—Terence. Latin Prose Composition. History of Greece. Herodotus and Thucydides. Geometry completed.

Third Term—Horace—Odes. Memorabilia of Socrates. History of Greece. Trigonometry.

Sophomore Year.

First Term—Horace—Epistles, Satires, and Ars Poetica. Sophocles—Œdipus Tyrannús. Analytical Geometry (Loomis).

Second Term—Tacitus. Juvenal. Pliny—Letters. Plato. Rhetoric.

Third Term—Plautus. Selections from Lucretius and Catullus. Demosthenes—De Corona. Surveying (Loomis), or Botany.

Junior Year.

First Term—German (Whitney's Grammar). French. Logic. Chemistry, with Lectures.

Second Term—German. French. Anatomy and Physiology. Natural Philosophy—Mechanics and Hydrostatics (Snell's Olmsted).

Third Term—German, or Latin, or Greek. French. Geology, with Lectures. Natural Philosophy—Pneumatics and Optics.

Senior Year.

First Term—English Literature. Mental Philosophy. Astronomy (Snell's Olmsted).

Second Term—Mental Philosophy. Guizot's History of Civilization in Europe. Political Economy. English Literature.

Third Term—Moral Philosophy. Lieber on Civil Liberty, or Art. Evidences of Christianity, with Lectures.

Lessons in the Bible, or Greek Testament, and Rhetorical Exercises, weekly, throughout the course.

Option between two or more studies is allowed at various points in the course. During Junior Year, the student may select three of the four studies specified, but must complete each study begun.

Candidates for admission to the Freshman class who have pursued their preparatory studies elsewhere are examined in the following books and subjects, or their equivalents:

Latin Grammar, including Prosody.
Cæsar, two books.
Cicero, seven orations.
Virgil, three Bucolics and six books of the Æneid.
Jones's Latin Prose Composition.
Smith's Smaller History of Greece and of Rome.
Greek Grammar, including Prosody.
Xenophon, Anabasis, three books.
Homer,* Iliad, two books.
Higher Arithmetic, including the Metric System.
Loomis's Algebra, through Quadratic Equations.
Loomis's Geometry, four books.
English Grammar and Geography.
Civil Government and Book-keeping.

All candidates for advanced standing in this and the following courses are examined, in addition to the preparatory studies, in those already pursued by the class which they propose to enter.

SCIENTIFIC COURSE.

Freshman Year.

First Term—Algebra completed. Mediæval History. French Language. Free-hand Drawing.

Second Term—Geometry completed. French. Modern History.

Third Term—Trigonometry (Loomis). French. Botany (Gray).

Sophomore Year.

First Term—Analytical Geometry (Loomis). Chemistry, with Lectures, Physical Geography.

Second Term—Chemistry, with Lectures. Rhetoric. Mineralogy, or Calculus.

Third Term—Art. Surveying (Loomis). Constitutional History.

Junior Year.

First Term—German (Whitney's Grammar). Perspective. Logic. Zoölogy.

Second Term—Natural Philosophy—Mechanics and Hydrostatics. (Snell's Olmsted). German. Anatomy and Physiology.

Third Term—Natural Philosophy—Pneumatics and Optics. German. Geology.

Senior Year.

First Term—English Literature. Astronomy (Snell's Olmsted). Mental Philosophy.

Second Term—English Literature. Mental Philosophy. Guizot's History of Civilization in Europe. Political Economy.

Third Term—Evidences of Christianity, with Lectures. Moral Philosophy. Lieber on Civil Liberty.

The Latin or Greek of the College Course will be accepted in lieu of the Mathematics in the above course beyond the Freshman year.

Lessons in the Bible and Rhetorical Exercises, weekly throughout the course.

---

* In place of Homer, the last six books of Virgil's Æneid or 2,000 lines of Ovid will be accepted.

Candidates for admission to the Freshman class of this department must sustain a satisfactory examination in English Grammar and Analysis, Arithmetic, including the Metric System, Algebra through Quadratic Equations, four books of Loomis's Geometry, History of the United States, Geography, Civil Government and Book-keeping.

LITERARY COURSE.

First Year.

First Term—Cicero's Orations (Chase and Stuart). Algebra completed. Physical Geography.

Second Term—Cicero's Orations. Modern History. Geometry completed.

Third Term—Cicero's Orations. Constitutional History or Trigonometry (Loomis). Latin Prose Competition.

Second Year.

First Term—French Language. Analytical Geometry, or Chemistry, or History of Rome. Virgil's Æneid. Latin Prosody.

Second Term—Chemistry, or Calculus, or Mineralogy. French. Virgil's Æneid.

Third Term—French. Botany. Virgil's Æneid.

Third Year.

First Term—German (Whitney's Grammar). Zoölogy. Logic.

Second Term—German. Rhetoric. Natural Philosophy—Mechanics, or Anatomy and Physiology, or Greek History.

Third Term—Natural Philosophy—Pneumatics and Optics. German. Geology.

Fourth Year.

First Term—English Literature. Mental Philosophy. Astronomy.

Second Term—Mental Philosophy. Guizot's History of Civilization in Europe. Political Economy. English Literature.

Third Term—Moral Philosophy. Evidences of Christianity, with Lectures. Lieber on Civil Liberty, or Art.

For some of the above studies, students may, at the option of the Faculty, substitute Music or advanced studies in the other courses.

Lessons in the Bible and Rhetorical Exercises, weekly, throughout the course.

Candidates for admission to the first year of this course are examined in English Grammar and Analysis, Higher Arithmetic, including the Metric System, Algebra through Quadratic Equations, four books of Loomis's Geometry, Latin Grammar, Latin Reader, two books of Cæsar, History of the United States, and Geography.

COURSES OF STUDY.

PREPARATORY DEPARTMENT.

CLASSICAL COURSE.

Junior Year.

First Term—Latin Grammar continued through the course. Latin Lessons. Arithmetic (Olney). English Grammar and Analysis.

Second Term — Latin Lessons and Cæsar. Arithmetic. English Grammar and Analysis. Book-keeping.

Third Term—Cæsar (Chase and Stuart). History of the United States. Civil Government.

Middle Year.

First Term—Cicero's Orations (Chase and Stewart). Greek Grammar continued through the course (Goodwin). Greek Lessons (White). History of Rome.

Second Term—Cicero's Orations. Greek Lessons and Anabasis. History of Greece.

Third Term—Cicero's Orations. Latin Prose Composition. Xenophon's Anabasis.

Senior Year.

First Term—Virgil's Æneid. Latin Prosody. Algebra (Loomis). Greek Prose Composition. Xenophon's Anabasis.

Second Term—Virgil's Æneid. Algebra through Quadratic Equations. Homer's Iliad. Xenophon's Anabasis.

Third Term—Virgil's Æneid. Homer's Iliad. Geometry (Loomis).

LITERARY COURSE.

First Term—Latin Grammar. Latin Lessons. Algebra. English Grammar and Analysis.

Second Term—Latin Lessons and Cæsar. Algebra. Arithmetic.

Third Term—Cæsar. Geometry. History of the United States.

SCIENTIFIC COURSE.

First Term—Arithmetic. English Grammar. Algebra.

Second Term—English Grammar. Algebra. Book-keeping.

Third Term—History of the United States. Geometry. Civil Government.

Lessons in the Bible and Rhetorical Exercises, weekly, throughout the courses.

The courses of study and instruction defined above are designed thoroughly to prepare students for admission to the College department of this Institution, or to any other College in the country.

All candidates for advanced standing in these courses are examined in the studies already pursued by the class they propose to enter.

☞ Classes commencing the study of Latin are formed twice in each year—at the beginning of the Fall and Winter Terms.

NORMAL DEPARTMENT.

FULL ENGLISH COURSE.

(Three years).

First Year.

First Term—English Grammar. Arithmetic. Reading and Orthography. Algebra. Drawing and Vocal Music.

Second Term—Algebra. English Grammar. Book-keeping. Geography. Penmanship.

Third Term—United States History. Elementary Methods. Civil Government.

Second Year.

First Term—Algebra. Mediæval History. Zoölogy.

Second Term—Principles of Education and Methods. Physiology. Natural Philosophy.

Third Term—Elements of Mental Philosophy and School Management. Geometry (Plane) Botany.

Third Year.

First Term—English Literature. Mental Philosophy. Logic.

Second Term—Geometry. Rhetoric. Chemistry.

Third Term—Advanced Professional Instruction (Lectures). Geology. Moral Science.

LANGUAGE COURSES.

(Four years).

First Year.

First Term. Latin. English Grammar. Arithmetic. Vocal Music. Drawing.
Second Term—Latin. Arithmetic. English Grammar. Geography,
Third Term—Latin. United States History. Civil Government.

The first year of the Modern Language Course will be identical with first year of the Full English Course.

Second Year.

First Term—Latin or German. Greek or Mediæval History. Algebra.
Second Term—Latin or German. Greek or Algebra. Book-keeping.
Third Term—Latin or German. Greek. Vocal Music. Geometry.

Third Year.

First Term—Latin or Geometry. Greek or French. English Literature.
Second Term—Latin or Rhetoric. Greek or French. Natural Philosophy.
Third Term—Latin or Perspective Drawing. Greek or French. Botany.

Fourth Year.

First Term—Latin or Physiology. Greek or Perspective Drawing. Mental Philosophy.
Second Term—Political Economy. Chemistry. Moral Philosophy and Logic.
Third Term—Evidences of Christianity. Essays on Educational Topics. Advanced Professional Instruction.

Lessons in the Bible and Rhetorical Exercises, weekly, throughout all the courses.

The professional instruction in Reading and Elocution, and the reviews in the common branches, will be conducted by the Principal of the Normal Department. The advanced studies will be pursued under the instruction of the College Professors in their respective departments.

A class will be organized in the Fall and Spring terms for the benefit of those about to teach. It will last half the term.

Those who complete the Elementary Course will receive a certificate signed by the President of the College and the Principal of the Normal Department.

Those who complete any of the full courses will receive a Normal Diploma.

THE ART DEPARTMENT.

This has been under the care of Mrs. Ella M. Kedzie, who has given ample proof of her fitness for the work. Her rooms are furnished with casts, easels, patterns, and all necessary materials.

THE MICHIGAN CONSERVATORY OF MUSIC.

This is under the care of Prof. C. H. Johnson, a graduate of the N. E. Conservatory of Music.

It maintains a high standard of excellence, and affords students rare facilties for instruction. It offers a course which extends through four years. A real education of the musical faculties is sought, rather than an illustrative training in styles which are to be imitated by the pupil. The aim of the management is to secure a complete mastery of the branches undertaken by the student. Instruction is given in playing the piano, organ, and cabinet organ; in solo, chorus, and glee singing; in vocal culture, and all the branches of the theory of music.

THE LIBRARY.

The Library Fund has been increased to $15,000 by the addition of $5,000 from the estate of Mrs. Lucy E. Tuttle, who established the Fund. The income affords means for rapid growth. There are over 12,000 volumes, and between 5,000 and 6,000 pamphlets. Steps have been taken toward the erection of a fire-proof building, which is greatly needed.

THE BROWN CABINET

embraces more than 50,000 specimens. The fossils are numerous and valuable. The minerals are three-fifths of those found on Prof. Dana's list. The shells are most numerous, and illustrate the conchology of the globe.

THE PALMER MUSEUM

contains Ward's series of casts of fossils. These, with the fossils, minerals, and typical rocks of the Brown Cabinet, finely illustrate Geology, Mineralogy, and Paleontology.

MATHER HALL

has been finished and put to the uses for which it was built. In the lower story of the main building are two fine recitation rooms, a room for philosophical apparatus, and a private laboratory. In the upper story the Brown Cabinet and the Palmer Museum have found at last a permanent home. The annex has two stories and a basement. In the basement is the laboratory, finely furnished with all modern appliances for analytical chemistry. The first story furnishes a chemical lecture-room, and the upper story is devoted to Botany, Mineralogy, and Zoölogy. The hall is named for Roland Mather, Esq., of Hartford, Conn., a generous benefactor of the College.

RELIGIOUS CULTURE.

All students are required to attend weekly exercises for the study of the Bible.

All students are required to attend devotional exercises daily in the College Chapel, and public religious worship twice on Sunday. Unless special request is made to the contrary by parents or guardians, all students are required to attend public worship at the College Church.

The students sustain two organizations for religious and philanthropic work, entitled the Young Men's and the Young Women's Christian Associations. They maintain weekly religious meetings, and conduct Sunday-schools in the neighborhood of the College. The annual missionary address before these societies is delivered on Sunday evening of Commencement week by some speaker from abroad. Monthly missionary meetings are conducted by the students during the College year.

The new reading-room of the Young Men's Christian Association, at No. 6 Parsons Hall, has been neatly fitted and furnished, and affords an attractive place for reading, Bible study, and religious meetings, and adds much to the efficiency of the Christian work of the College.

EXPENSES.

Tuition in the College a term	$7 00
Tuition in the Preparatory Department, classical, a term	7 00
Tuition in the Preparatory Department, English, a term	5 00
Incidentals, a term	3 00
Room rent in Parson's Hall a year	$7 50 to 11 00
Table board, a week, in Shipherd Hall	2 25
Board and room in Shipherd Hall, a week	$3 50 to 4 00

NECESSARY EXPENSES.

Estimate of expenses necessary for a young man for an average term of thirteen weeks. It is based upon the supposition that two students occupy the same room:

Tuition	$5 00 to $7 00
Incidentals	3 00 to 3 00
Room rent in College	2 50 to 3 75
Fuel and lights	1 85 to 3 00
Washing	3 25 to 7 00
Books	3 00 to 5 00
Board	20 00 to 32 50
	$38 60 to $61 25

Estimate of expenses necessary for a young woman for a term of thirteen weeks:

Tuition	$5 00 to $7 00
Incidentals	3 00 to 3 00
Books	3 00 to 5 00
Washing	5 00 to 8 00
Board in Shipherd Hall	42 90 to 52 00
	$58 90 to $75 00

EXPENSES IN THE ART DEPARTMENT.

Prices for a term of twenty-four lessons.

Pencil Drawing	$4 00
Perspective	4 00
Charcoal Drawing, with use of casts	6 00
Crayon Drawing	12 00
China Painting	12 00
Water Colors and Sepia	12 00
Oil Painting	12 00

EXPENSES IN MUSIC.

For Piano, Organ or Voice Culture.

Classes of two pupils, 22 hour lessons, a term, each pupil	$12 00
Classes of three pupils, 22 hour lessons, a term, each pupil	10 00
Private instruction, 22 hour lesson, a term	18 00
Private instruction, 11 hour lessons, a term	10 00
Private instruction, 22 half-hour lessons, a term	12 00
Private instruction, 11 half-hour lessons, a term	6 00

For Theory of Music, Harmony, Notation, etc.

In classes, 22 lessons, a term	$5 00

AID TO STUDENTS.

Deserving young men who are preparing for the ministry may have tuition remitted.

In the College course such young men can usually receive twenty-five dollars a term from the American College and Education Society.

Students under the care of Presbytery receive aid from the Board of Education of the Presbyterian Church.

Tuition is remitted to the daughters of missionaries. The income of the Carter Fund is bestowed upon worthy young ladies who need help.

Rarely does a worthy student leave College for lack of means.

In several respects the year which this report covers is the most important in the history of the College. The number of students has but once or twice been exceeded. The dedication of Mather Hall on Commencement day, with an address by Rev. William B. Brown, D. D., the giver of the Cabinet which bears his name, marked the success of efforts that reached through years. The building is an embodiment of the faith, and the patience, and the sacrifice which have entered so largely into the very life of the College. The year has been blessed with a revival of religion which has affected nearly every student in the Institution, influenced the whole village, and made itself felt for good for miles in the surrounding country. Finally, there has been disclosed in the will of a friend of the College a legacy, part specific and part residuary, which promises to swell the endowment greatly. For these reasons the friends of the Institution rejoice and take courage.

Very respectfully yours,
HORATIO Q. BUTTERFIELD,
President.

VISITORS' REPORT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—Your committee, appointed to visit Olivet College, arranged to meet there late in June. At the last moment, however, sickness and business engagements prevented the attendance of two members, and the visit was, therefore, made by the chairman alone. Full opportunity was afforded to visit classes during recitations, to inspect library, museum, and laboratory, and to gain a thorough understanding of the aims and methods of the Institution.

All the surroundings of Olivet College contribute to its chief purpose—to give a thorough education under circumstances tending to develop Christian character. Olivet is a beautiful village, in the midst of a delightful country. The sobriety and quiet of the place are sufficient to bar out institutions and habits that bring temptation and dissipation in their train.

The College buildings, with recent erections, are convenient, and, for the present, ample. Library, museum, and laboratory are richer, better filled and equipped than might be expected outside of large university towns.

Mather Hall is the newest addition to the College buildings, and in it are the laboratories, chemical and botanical, and the general museum. These departments are all exceedingly well equipped, and furnish facilities for study and research not generally understood. The student will find here every needed accessory to the pursuit of science.

Literary societies flourish among the students, and we listened in the evening in these societies to essays, orations, and debates of a high order.

Notwithstanding the means of the College are limited, devotion to the cause of Christian education enables the trustees to gather here a faculty of recognized ability, of ripe scholarship, and of enviable reputation.

After a day spent in careful and candid investigation, the conclusion arrived at is that the College is worthy of high commendation, higher even than has ever been bestowed upon it. The attendance of students has grown steadily in recent years, and, if the equipment with laboratory, apparatus, and library were more widely known; if the high moral tone of the community and the students were more justly appreciated; if character and habits were estimated at their real value, prudent parents would send to Olivet their sons and daughters in still larger numbers.

Time, and a fuller acquaintance with the facts, can be depended upon to bring about this desirable result.

Respectfully submitted,
C. B. THOMAS,
Chairman Com. of Visitors.

MICHIGAN FEMALE SEMINARY.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

DEAR SIR,—It is with pleasure that the undersigned, constituting the Board of Visitors to the Michigan Female Seminary for the scholastic year 1884 and 1885, submit the following report:

Your committee visited the seminary at three different times during the year, witnessing the regular work of the school, its duties pertaining to the physical as well as the mental culture.

With interest we noted the efficient, faithful work of the teachers, and the thoughtful earnestness of the students, who, in their prompt recitations and criticisms of opinions given by class-mates, showed careful preparation of the lesson, and indicated growth in the right direction; a true development, which is true education.

The domestic arrangements gave opportunity for an insight into household affairs, so essential in a young lady's education.

Each young lady has her own private room, which she is allowed to arrange according to her taste, and the artistic decorations in many of the apartments were most pleasing, making home-like places between school-room walls.

The home culture and religious training of the school should commend it to the public; but there was lacking that enthusiasm which numbers alone can create, there being but 33 pupils in attendance.

With its possibilities, in an additional endowment fund bequeathed during the past year, would it not be possible, as well as practicable, to make of it such a school that our girls need not seek a Vassar or a Wellesly in the east, but find one equally good at home?

Respectfully,
MISS ENCIE J. COLEMAN,
MRS. JAMES OSBORN,
MRS. C. F. BALLENTINE,
Visitors.

MICHIGAN MILITARY ACADEMY.

REPORT OF SUPERINTENDENT.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—Conforming to the laws of our State on this subject, I beg to submit to you the accompanying report of the Michigan Military Academy for the year 1884–5.

The past year has been the most successful one in the history of this Institution. The enrollment of cadets was 113, and the average attendance about 100; the highest ever reached in proportion to the whole enrollment. Fifteen graduated in the various courses at our late commencement. Of these a number will continue their studies at our State University, or other institutions of learning.

The physical development and excellent health of the cadets during the year has been a marked and pleasing feature.

Several boys of too delicate health to continue their studies at home have pursued their course with us, and have gone home robust and vigorous as their fellows. In no former year have the beneficial effects of the military system, in this particular, been so fully demonstrated.

The added comfort and convenience of the cadets through the erection of our new barracks, and other improvements in our buildings, has been very marked. Still the need of increased accommodations is deeply felt, for, with needed additions, the number of cadets attending the Institution would be greatly increased.

The moral tone of the Academy has improved during the year, serious offenses against the rules of the School having been exceptionally rare.

It is an interesting feature that a large proportion of the cadets in attendance last year are registered to return the coming year, while the application for admission for others were never before so numerous at this season as now.

We are confident that at some future day the people of Michigan will appreciate the special work of this Academy in sending out annually young men trained in military tactics, and in the art of organizing and commanding men, and thus supplying the State troops with trained officers. We have already graduated a sufficient number to officer well a brigade of troops, and this without any expense to the State of Michigan.

All which is respectfully submitted.

J. SUMNER ROGERS,
Col. Mich. State Troops, Superintendent.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—The Board of Visitors for Michigan Military Academy, at Orchard Lake, would most respectfully report:

That they visited that Institution on the 4th day of June, 1885. That they reported themselves to the Superintendent, Col. J. Sumner Rogers, by whom they were very cordially welcomed and given full liberty to visit all the quarters, recitations and field exercises of the Institution.

They found the sanitary regulations of the premises, the order and cleanliness of the barracks all that could be desired to promote health and comfort.

The academic instruction will rank well with other institutions of learning in Michigan. There were young men from various parts of this country, and two from Panama, U. S. of Columbia. There were not a few of more than ordinary minds that give promise, by that kind of education, of becoming very useful citizens.

The field exercises seemed to call out the pride of the cadets. Better maneuvering is seldom witnessed among old soldiers. The manual was very prompt and accurate. After recitations the drill seemed to be welcomed as a pastime, as a pleasure.

There were about 100 cadets in attendance. There was an air of respect and obedience everywhere. No idling or strolling about was observed, but, on the contrary, a spirit of industry and content seemed to characterize the whole.

The moral tone is not lost sight of, as was manifest in the language and deportment of every one.

In fact, while the Board have no disparaging report to make, they found much, and indeed everything, to entitle the Michigan Military Academy to the support of all who would combine physical exercise, mental culture, moral tone, and military instruction and discipline in the education of their sons.

A. M. KEELER,
D. HOWELL,
Visitors.

REPORT OF INSPECTORS.

HON. RUSSELL A. ALGER,
Governor of the State of Michigan:

SIR,—We, the undersigned, inspectors of the Michigan Military Academy, appointed on May 11, A. D. 1885, having performed the duties imposed upon us by said appointment, beg leave to make the following report:

We visited the Michigan Military Academy, situated at Orchard Lake, on June 17, 1885, that being commencement day for the class of 1885. We were present at the graduating exercises, and witnessed the military drill performed by all the cadets of the Academy upon the drill grounds of the school.

We found the Academy to be situated on the shore of a beautiful lake, in the midst of as beautiful and healthy a country as lies within the borders of our State. The school buildings are of good size, adequate for the number of pupils sought to be accommodated. The buildings present a very fine external appearance, and are well appointed and equipped within. The grounds surrounding the Academy buildings are large and beautifully shaded, affording ample room for the military exercises of the cadets, as well as the necessary space for other out-door exercises, games, and the like. The situation and grounds attached thereto, taken as a whole, seem to combine in themselves all the necessary elements of a first-class military school and healthful home for those who attend the Academy.

We found the Academy to have students of all classes, and a graduating class numbering fifteen students, and feel warranted in saying that, considering the age of all the students, the graduates sent forth from this Academy are as thorough in the respective branches of education to which they have given their attention as the students of any like institution of learning in the country.

We beg leave further to report that, while the mental training and education received at the Academy is in all respects thorough and efficient in itself, its value is highly increased by the fact that while young men are being educated in the different branches of learning, their physical condition is being constantly developed and benefited by the healthful military exercises in which the cadets must daily take part and almost necessarily become efficient.

In addition to the physical benefits to be received by the means of military drill, the military training and education produce equally far-reaching results upon the mental and moral condition of the students. They are taught respect and obedience to superiors; to submit to a government which is though firm yet necessary. They are taught self-confidence, and in case of emergency are fitted to take the part of either commander or subordinate with equal facility, thus fitting every student to become a future useful and valuable citizen or soldier and ready to assume a prominent position in either peace or war, as fortune or necessity may demand.

We regard the military system of education for young men as carried out at the Michigan Military Academy, with a view to preparing students for admission to the Michigan University to obtain advanced education, or preparing them to assume the duties and responsibilities of life, as commendable in the highest degree, by reason of the high order of the moral, mental, and physical instruction afforded at the Academy.

At the time of our visit there were present some of the officers of the Academy, each of whom seemed to vie with the others in an honest endeavor to see who would be foremost in advancing the standing of the school.

We also had the pleasure of meeting the professors and instructors in charge of the Academy, and feel satisfied that we speak truthfully in saying that, so far as we could judge, they were without exception competent and efficient in their respective positions; and that the Michigan Military Academy is worthy of the confidence of parents and guardians of young men for whose education they are responsible.

All of which is respectfully submitted.

E. S. LACEY,
GEO. W. WEADOCK,
Inspectors.

SOMERVILLE SCHOOL.

REPORT OF PRINCIPAL.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

DEAR SIR,—I am happy to state to you that Somerville School is doing an excellent work in all its several departments. The branches taught in the several courses of study you will learn from the Curriculum, which is published in the annual catalogue of the school.

The instructors are as follows:

Dr. C. C. Wetsell, Mental and Moral Philosophy and Chemistry.
Harrison T. Hickok, A. M., Ancient Languages and Higher Mathematics.
Miss M. Annie Wythe, Belles-lettres and French.
Miss Firza L. Barnes, A. B., German and Mathematics.
Miss Carruth Buchanan (Graduate of Monroe School of Oratory), Elocution, Reading and Higher English.
Mrs. Helen M. Wetsell, Drawing, Painting, etc.
Miss Josie E. Knight, Piano, Organ and Musical Composition.
Miss Jessie E. Wells, Voice Culture, Singing and History.

NUMBER TAUGHT DURING THE YEAR.

Mental and Moral Philosophy	8
Chemistry	7
Latin	9
Algebra	30
Arithmetic	37
Geometry	9
French	20
German	13
Elocution	14
Drawing and Painting	11
Piano	29
Singing	8

The courses of study pursued and text-books are given in the circulars sent you. The value of the school property is estimated at $60,000—all of which is paid. The buildings and permises are in most excellent order in all respects. None but thoroughly qualified and thoroughly competent teachers are employed, and to secure such the highest salaries are paid.

All of which is submitted with due respect.

Very truly yours,
C. C. WETSELL,
Principal.

REPORT OF VISITORS.

HON. THEODORE NELSON,
Superintendent of Public Instruction:

SIR,—The State Visitors appointed for the scholastic year 1884–5, to inspect Somerville School for young ladies, submit the following report:

We made a joint visit to the School in May, at which time we attended the regular daily exercises.

We listened to recitations in Algebra, Latin, Geology, Elocution, English, Literature and French. The work done in the last mentioned subject won our special approbation, as the entire exercise was conducted in the French language.

As a rule the instruction was of a high order, and the responses gave evidence of study and interest on the part of the pupils.

A gymnastic drill is a part of each day's routine, and the physical culture thus obtained was plainly visible in the graceful movements and perfect health of the young ladies.

The School is supplied with apparatus for illustrating the various sciences, and has a library of choice books and a reading room.

The work of the pupils in Drawing and Painting spoke well for the Department of Art.

In addition to the intellectual advantages afforded, is a home-like home, whose moral training and refining influence must do much in producing the culture here acquired. It offers a strong and peculiar attraction to the patrons of this School.

Very respectfully,

LOIS McMAHON,
MRS. B. W. JENKS,
MRS. O. D. THOMPSON,
Visitors.

GERMAN-AMERICAN SEMINARY.

REPORT OF THE VISITORS.

Hon. Theodore Nelson,
Superintendent of Public Instruction:

Sir,—The committee appointed to visit the German-American Seminary respectfully submit the following report:

The German-American Seminary, located at 251-259 Lafayette street, Detroit, is unsectarian in its work, and is organized in two departments, the kindergarten for boys and girls from 3½–6, and the school proper for pupils from 6 14 years of age.

The course of study corresponds for the most part to the graded work in the public schools, with some elementry instruction in a few of the high school studies. A sewing school run in connection with the other work is a step in the right direction.

German is a special feature of the school, and deserves commendation. The work in German includes Reading, Writing, Spelling, and German Literature and Translation.

The school this year enrolls 190 pupils, and is ably managed by four regular teachers and two assistants.

Your committee was favorably impressed by the interest shown both by teachers and pupils in their work, and by the general information on topics which as a rule are not treated soon enough in our public schools.

The music and kindergarten departments, while not quite up to the other work, are interesting features of the school, and will naturally improve with age.

The school is well managed, its rate of tuition low, and on the whole is doing good work.

GEO. BARNES,
JOHN A. STEWART,
JUSTIN R. WHITING,
Visitors.

PROCEEDINGS

AT THE

FIFTH ANNUAL MEETING

OF

COUNTY SCHOOL EXAMINERS.

HELD AT LANSING, DEC. 29, 1885.

ANNUAL MEETING OF COUNTY SCHOOL EXAMINERS.

Lansing, Dec. 29, 1885.

The meeting was called to order by President J. G. Plowman.

Secretary Brunson being absent, on motion Jay Calkins was elected secretary *pro tem.*

On motion by O. D. Thompson, all present who are not members of examining boards were invited to participate in the deliberations of this body.

Minutes of last meeting, session of 1884, read and approved.

On motion, the order of program was changed, owing to the absence of Mr. Pemberton, and Supt. Church's paper on "Real Work of County Boards, Legal and Advisory," was read by him.

D. E. Haskins being absent, Jay Calkins, of Leslie, opened the discussion of the paper, followed by Messrs. Huston, of Ingham; Clizbe, of Lapeer; Warren, of Washtenaw; Downie, of Muskegon; Cogshall, of Muskegon; Humphrey, of Allegan; Clapp, of Kalamazoo; Clark, of Oakland; Everden, of Gratiot; Fouch, of Gladwin.

The general drift of the discussion was that the advisory was the more important part of the board's duty; that the examiners and chairmen should meet for counsel and advice at least three times per year; that boards of graded schools ought not to be allowed to employ as principals persons holding only third-grade certificates, and that the examiners ought to have charge of and direct the visiting of schools.

DISCUSSION.

Dr. Huston, secretary of the Ingham county Board, said: The custom of beginning school without first having received a certificate, in hope afterward of *worrying* one out of the board of examiners on the plea of having already commenced their school, is becoming quite prevalent, at least in his county.

He thought it was the duty of examiners to do all in their power to prevent this flagrant violation of law. A teacher who was so *ignorant* as not to know the law on this subject was not well enough posted to teach school, and one who *knew* the law, and yet held its obligations so lightly, was morally disqualified.

Such teachers should be refused certificates.

N. L. Downie, of Muskegon county, said that they had been forced to grant a few certificates to applicants whose standing in orthography, reading, penmanship, grammar, and arithmetic approached uncomfortably near the *freezing point*, but this is by no means the general practice of the board. We require an average standing of 75 per cent. for third grade, 85 for second, and 90 for first. The teachers of the county are making commendable efforts to bring their average standing up to the standard adopted, and are generally successful.

James H. Cogshall, of Muskegon county, thought it unnecessary for the examiners to wrestle with the problem as to what grade of schools holders of third-grade certificates should be entitled to, as there appears to be nothing in the law precluding them from the best positions if the boards of education so elect; it rests with school boards themselves to determine whom they shall employ, being restricted only to those who are *legally* qualified. He advocated extreme caution in the matter of granting certificates. Muskegon county had raised her per cent. this year, and now required 75 per cent., 85 per cent., and 90 per cent. for the respective grades, and gave close attention to the exact work of each candidate in the examination of papers. He recommended the establishment of a county association of teachers and reading circles, in which all the teachers of the county should take an active part, and the adoption of a plan of work which all should, as far as local circumstances would permit, seek to establish in their respective schools. Let examiners and chairmen of school inspectors and patrons get acquainted with each other and strive to excite a laudable ambition to make the very best possible results of combined effort.

On motion of Dr. Huston, of Ingham, the *School Moderator* was requested to publish Supt. Church's paper.

Further discussion was deferred until the afternoon session.

The chair appointed Clizbe, Downie, Warner as committee to report whether or not, and how much, credit should be given teachers on examination for reading and taking educational papers and educational books and for work in reading circle. As committee on school legislation, Warner, of Washtenaw. Committees to report in the afternoon.

2 P. M.—Meeting called to order by Vice-President Thompson, President Plowman being absent.

Mr. Pemberton's paper was read by Superintendent Humphrey, of Allegan County, as the subject—"Work of Chairmen of Township Boards—Real and Prospective"—was such as to facilitate the discussion of the previous paper.

Discussion opened by Humphrey, followed by Calkins and Huston, of Ingham; Latta, of Allegan; Everden and Ewing, of Emmet; Cogshall, Warner, and Hardy.

Mr. Latta recommended that the secretary of the examining board prepare a program for the joint conference of the examiners with the chairmen, held immediately after election of examiners, covering such questions as the best method of visiting, etc., which was generally endorsed by the meeting. The question of the examiners visiting was further pressed, and the opinion was very general that the questions furnished by the State board for examination of teachers the past year were too simple.

The committee on teachers' credits reported; report accepted and committee discharged. On motion, report was adopted, which was as follows: That for work done in the State Teachers' Reading Circle by applicant for ficate and accepted by the central committee, the examiners add at least one per cent. to the general average for each book read or part of work so done.

For work out of the circle, for one book or part of book, a credit of from 5 to 10 per cent. on the branch studied. For reading journals, notice should be taken, and, when desirable, additions might be made, but only after good assurance had been given to show that the reading had been actually made. Signed, W. D. Clizbe, N. L. Downie, E. C. Warner.

On motion of N. L. Downie of Muskegon, the following resolution was unanimously adopted:

Resolved, That it is the sense of the county examiners in association assembled that the Michigan School Moderator, published at Lansing by H. R. Pattengill, is fully entitled to the confidence and support of the teachers of Michigan.

The committee on school legislation reported by introducing the following resolution, which was adopted:

Resolved, That the chair appoint a committee of three to draft a bill to be presented to the next Legislature, amending the law so as to make the examiners the visitors of schools.

The chair appointed as such committee M. J. Lehman, J. G. Plowman, Jay Calkins.

A call of counties showed only 20 counties represented.

The election of officers for the ensuing year resulted as follows:

President, J. G. Plowman; vice-president, P. A. Latta; secretary, J. T. Ewing; treasurer, Jay Calkins; executive committee, Humphrey, Ewing, and Church.

On motion the president was made *ex-officio* member of the executive committee.

On motion the association adjourned to the last Tuesday in 1886.

Members present: Warner, of Washtenaw; Meddaugh, of Huron; Plunkett, of Shiawassee; Clapp, of Kalamazoo; Honey, of Tuscola: Cogshall, of Muskegon; Fisher, of St. Clair; Palmerlee, of Lapeer; Everden, of Gratiot; Church, of Montcalm; Brandt, of Van Buren; Fouch, of Gladwin; Thompson, of Macomb; Cooper, of Shiawassee; Humphrey, of Allegan; Phister, of Ionia; Bemis, of Ionia; Millard, of Ionia; Latta, of Allegan; Clizbe, of Lapeer; Ewing, of Emmet; Huston, of Ingham; Calkins, of Ingham.

JAY CALKINS,
Secretary pro tem.

REAL WORK OF COUNTY BOARDS--LEGAL AND ADVISORY.

BY SUPT. E. P. CHURCH, GREENVILLE.

The school law of this State determines the conditions which must be satisfactorily met by every applicant before receiving a license to teach.

The legal work of the County Board then clearly is, to ascertain the applicant's fitness to teach, as regards the particulars mentioned in the law.

In the first place, examining boards are called upon to certify that every person licensed by them to teach is found to "possess a good moral character." Undoubtedly this is the most difficult point to determine in the whole list of qualifications, and for several reasons. Comparatively few of the candidates, especially in large and populous counties, are personally known to the examiners. Certificates of character are not always entirely reliable; for even good people are unwilling to refuse a testimonial to a neighbor, or are shy about telling the whole truth when that is unfavorable. Probably there are few persons in this State, who could not by a little management, secure some excellent commendations as to character, fitness to have charge of children, etc.

Doubtless the best course for examiners to pursue is to issue certificates to those whom they find well qualified intellectually, and in whom they have no reason to suspect any moral delinquencies. Well known or well attested immorality, such as habitual profanity and obscenity, regular or spasmodic intemperance or lewdness, should be considered fatal disqualifications for the teacher's office; also, gambling and general dishonesty. Indeed, any taint that renders one unfit to be a safe guardian of children, and a worthy example for them, is to be carefully guarded against.

Besides the so-called "moral character," there are other qualifications somewhat nearly allied, and scarcely less important. A nice sense of propriety in personal manners, habits, dress, and in the social relations of life, is not required by law, but yet will affect the ease or difficulty with which a teacher does his work, and largely determine his success or failure. Without doubt the examining board should take some cognizance of such things. We may call this the teacher's æsthetic qualification, or his sense of "the everlasting fitness of things."

It is clearly the duty of county examiners to ascertain the intellectual furnishing of the would-be-teacher. A *fair* understanding of the common branches should not generally be deemed sufficient. A *very clear* apprehension of the truths to be taught is very essential. Unless an instructor can make sharp distinctions, he will hardly develop that ability in his pupils. Nor is excellent scholarship alone all that is required in a good teacher. Some minds grasp truths with great facility, indeed, they may be brilliant, and yet manifest a very small degree of ability to communicate knowledge to others. It is a question whether a sparkling genius will ever make a highly successful teacher. The important thing for the examiner to ascertain is whether the applicant for a certificate possesses the ability to set forth truth in such a clear, simple, and orderly manner that the learner is easily, safely, and surely led into the domain of knowledge.

A lack of ability to analyze, explain, and simplify, should be regarded by the examiner as a serious defect. The ability to obtain "the answer in the book," is far from being a full qualification for teaching, even in a very small district school.

The plan of passing teachers upon a "general average" of their standing is of doubtful propriety. Should a standing of 100 in arithmetic be allowed to offset a 50 in grammar? Or a 90 in history a 60 in reading? Will an excellent knowledge of algebra qualify one ignorant of physiology to teach the proper care of the human body, or the effects of narcotics and stimulants? Will skill in single and double entry atone for ignorance of the English language? My judgment is that this sort of winking at deficiencies, especially in the more common branches, is both legally and morally wrong.

Ability to *control* and *manage* a school is as important as any other qualification. Indeed, perhaps, it should be put next to moral character in the list of qualifications. It is entirely possible for a school to be so disorderly, such a nursery of ill manners and bad morals, as to be absolutely worse than no school. The teacher that permits such a condition of things, for two or three terms, whether in the same or different schools, should, in my opinion, be refused a license to continue this occupation longer.

One essential qualification of a good teacher, and always to be taken into consideration by the examiners, is a sound, reliable judgment,—good common sense.

The only remaining legal duty of the examiners as a board, that needs mention, is that of *revoking certificates*. I have no means of knowing in how many instances this prerogative has been exercised in the State since the present school law took effect, but presume the number is small. It requires more moral courage on the part of the examiners to do this fearlessly and resolutely, than is called for in the performance of any other of their official acts. The condemned teacher usually dies hard. Friends in unexpected numbers rise up to intercede for him. Political, family, official, social and ecclesiastical influences are invoked in his behalf. Notwithstanding all this, there is no less need at times that the duty be done; and when once it is well done it settles many difficult cases for that administration.

It may not be amiss to allude to the duty of the secretary of the board in relation to "special" certificates. There has been in certain quarters, on the part of teachers, a great fondness for "specials." The reasons for not attending the regular public examinations, and therefore the necessity of a "special," are almost legion, and range all the way from an "unexpected call after having made a fixed determination never to teach again," to an honest confession that it would be impossible to obtain a certificate at the regular examination.

Public examination days are likely to be the most sickly days of the year. In one of the counties of the State a grandmother was found to be at the point of death regularly on examination days for two years, and so the granddaughter must be supplied with "specials." The grandmother's sickness has terminated, and the granddaughter has ceased to be an applicant for certificates of any kind.

The provision in the law allowing the secretary of the board to grant certificates at his discretion in certain cases, is a good one; but should be exercised with great care, and never for the sole purpose of enlarging the secretary's salary. Let no one suppose that those examiners certainly do the best service for the schools of their counties who "weed out" the largest number of teachers. The work of the examiners is not to puzzle and trip the applicant for a certificate, nor yet to exhibit their own knowledge and acumen. Those examiners do the best service for the schools who license only those teachers who are morally and intellectually well equipped, or who give promise of becoming such as soon as possible, and reject all others.

The *advisory* duties of county examiners are not as well defined as the legal, but are scarcely less numerous, and perhaps no less important. Examiners are often solicited to secure the right sort of teachers for schools. If the necessities of any given school are well known to an examiner, and also the qualifications, experience, and peculiarities of the teachers, valuable assistance can be rendered to both teachers and schools. In case of difficulties or complaints, just or unjust, between teacher and district, a judicious board of examiners, even when not summoned to exercise legal authority in the matter, may often secure a peaceful adjustment, when no other persons could. Should the examiners find that a teacher is unfit for his position, official advice to resign, and to make no further attempt to teach in that county, would almost certainly be quickly and quietly adopted. Sometimes advice equally salutary, may be given to a district board found unjustly criticising a teacher.

Whenever examiners receive letters of application for a position, or of inquiry for date of examinations, that afford unmistakable evidence of the writer's unfitness to teach, it is clearly the duty of the examiner, in a kind and courteous way, to discourage such applicant from making further search for a school, or from appearing at the examination. Sometimes it may be necessary only to say that the number of applicants is far in excess of the positions; and again, it may be duty to say that if the examiner may be allowed to judge of the writer's qualifications to teach, from the letter received, he advises the writer to pursue his studies still farther before attempting to pass an examination in his county.

It sometimes happens that an examiner receives a note of inquiry from a teacher in relation to the time of the next examination; and about the same time the examiner is put in possession of very grave charges of immorality or incompetency against the same teacher. If, on due investigation, the charges seem well substantiated by competent and unbiased witnesses, such a teacher may properly be advised not to apply for a certificate at the next or any succeeding examination, until a radical reform has been effected.

The cases named in which examiners may properly, yes,—are *in duty bound* to exercise advisory power, are not simply hypothetical, but are representative of cases which have actually occurred in the experience of an examiner, and may recall to each mind others of a similar character.

TRANSACTIONS

OF THE

MICHIGAN STATE TEACHERS' ASSOCIATION

AT THE

THIRTY-FIFTH ANNUAL MEETING

Held at Lansing, Dec. 28, 29, and 30, 1885.

MICHIGAN STATE TEACHERS' ASSOCIATION.

THE TRANSACTIONS OF THE THIRTY-FIFTH ANNUAL MEETING.

Lansing, Monday, Dec. 28, 1885.

OPENING SESSION.

The Association was called to order at 7:30 P. M., in the Senate Chamber, by President L. McLouth.

The first order on the program was a vocal quartet, "The Song of the Tritons," rendered by Mrs. Rarrick, Miss Baker, Messrs. Bement and Baker, assisted by Miss Barnard as pianist.

Devotional exercises were conducted by Pres. R. Dunn, of Hillsdale College.

Mrs. Rarrick, accompanied by Miss Barnard, sang a song, which was liberally applauded.

Dr. J. H. Kellogg, of Battle Creek, delivered the address of the evening, "School Sanitation."

This address was illustrated by apparatus to show correct modes of ventilation.

The Doctor also illustrated the manner of testing the purity of water.

After the address, Pres. McLouth announced the meeting of the National Teachers' Association in Kansas next summer, and urged a large attendance from Michigan. He suggested the propriety of some action on the part of this Association.

Supt. Howell, of Lansing, announced that he had been requested to put into the hands of the National Teachers' Association a list of Michigan teachers, all of whom would receive circulars of information concerning the annual meeting of the National Association, to be held in July, 1886.

Pres. McLouth called the attention of the Association to the action about to be taken by Congress on the "Blair Bill," by which large sums of money were to be appropriated from the National Treasury and distributed among the States for educational purposes.

Dr. Fiske, president of Albion College, by request of the "Bay View

Camping Association," invited the Association to hold a semi-annual meeting on the grounds of the former at Petoskey during the ensuing summer, a day for educational purposes already having been set apart by the Bay View Association.

On motion of Prof. Haynes, Hillsdale College, the Association tendered thanks to the Bay View Association for the generous invitation, and referred the entire matter to the executive committee for consideration.

On motion of Supt. Sill, of Detroit, the Association extended its thanks to Dr. Kellogg for his most excellent and practical address.

On motion, adjourned.

SENATE CHAMBER,
LANSING, Dec. 29, 1885.

Association called to order by President McLouth at 9:00 A. M.

Devotional exercises were conducted by President L. R. Fiske, of Albion College.

President McLouth read a telegram of greeting from 1,000 teachers of Kansas, in association assembled.

H. R. Pattengill moved that the secretary be instructed to send the greetings of 2,000 Michigan teachers.

Pending the action of this association on the matter of the meeting of the National Association next summer, Supt. W. D. Clizbe, of Lapeer, moved that Mr. Pattengill's motion be laid on the table. Carried.

At 9:20 A. M. the president began his address.

Following the president's address, Prof. D. M. Fisk, of Hillsdale College, opened the discussion of Dr. Kellogg's paper on "School Sanitation."

The discussion was continued by Dr. R. C. Kedzie, of the Agricultural College, who presented numerous illustrations to show the ready passage of air through clothing, wood, walls of buildings, etc., while little or no air can pass through rubber, paper, alabastine, fresco, etc.

Pres. Fiske, Albion; Prof. Haynes, Hillsdale; Prof. Taylor, Albion; Prof. Fall, Albion; Supt. Sill, Detroit; Supt. Osinga, Otsego; Supt. Howell, Lansing, and others, propounded numerous questions to Dr. Kedzie concerning the amount of air passing through walls of different kinds, the correct method of purifying the water in contaminated wells, and other subjects suggested by the paper and discussion.

Prof. Haynes, Hillsdale, moved that a committee of three be appointed whose duty it should be to consult with the State Board of Health in regard to the proper presentation of the subject of "School Hygiene" in our text-books on Physiology. Carried.

Paper, "Law of Liberty," by Mrs. Lucy A. Osband, State Normal School. The discussion of this paper was led by Supt. Kendall, Jackson, and Prof. C. F. R. Bellows, State Normal School; continued by Supt. Howell, Lansing, Pres. Fiske, Albion College, and Prof. Austin George, State Normal School.

The president appointed the following committees:

On Nominations—Supt. C. B. Thomas, East Saginaw; Prof. Fred. Taylor, Albion; Miss Lois A. McMahon, Ypsilanti; Prof. D. M. Fisk, Hillsdale; Supt. N. Hayden, Hudson.

On Resolutions—Supt. S. G. Burkhead, Saginaw; Supt. W. H. Cheever, Three Rivers; Miss Etta S. Boynton, Jackson.

On Necrology—Supt. J. W. Ewing, Ionia; Hon. J. M. Ballou, Otsego; Supt. W. L. Shuart, Lowell.

On Consultation with State Board of Health concerning School Hygiene—Mrs. Lucy A. Osband, Ypsilanti; Supt. J. M. B. Sill, Detroit; Supt. D. Howell, Lansing.

On Arrangements for this evening's Reception—State Supt. Theodore Nelson, Lansing; Supt. J. M. B. Sill, Detroit; Mr. H. R. Pattengill, Lansing; Prof. Austin George, Ypsilanti; Mr. H. C. Rankin, Olivet.

Supt. Howell offered the following resolution, which, on motion of Dr. Fiske, was referred to the Committee on Resolutions:

Resolved, That the President and Executive Committee of this Association be requested to arrange, in addition to the usual general program for the next meeting of the Association, a program of a day's exercises devoted to primary education in the interest of both graded and ungraded schools. The sessions of this section to be consecutive or to alternate with the sessions of the general association as the Executive Committee may deem best.

The following resolution was presented by Supt. Howell, which, on motion, was adopted:

Resolved, That in view of the fact that other organizations are taking measures to secure school legislation, this Association select a committee of three whose duty it shall be to take notice of proposed legislation affecting the public schools of the State, and recommend to the Association at its next meeting such legislation as they deem to be wise.

The President appointed the following for Committee on Legislation:
State Supt. Theodore Nelson, Lansing.
Supt. J. M. B. Sill, Detroit.
Supt. J. W. Ewing, Ionia.

Tuesday Afternoon Session.

Association called to order at 2 o'clock by President McLouth.

The President called Supt. J. L. Lucas, Niles, to the chair.

The first paper presented at this session was on "Some Recent Developments of Geographical Teaching in Europe," by Prof. John Goodison, State Normal School, Ypsilanti.

This paper was discussed by Supt. Howell, Lansing, and Supt. Sill, Detroit.

Recess.

After recess Prof. George S. White, of Jackson, read a paper on "The Value of Military Training in Schools."

Discussed by Col. J. Sumner Rogers, Michigan Military Academy, Orchard Lake.

Moved and carried that the Secretary be instructed to telegraph suitable reply to greetings received from Kansas State Teachers' Association.

The following response was sent:

"A host of Michigan teachers return cordial greetings to the fraternity in Kansas. Will meet you in large numbers at National Association next summer."

Supt. E. S. Hopkins moved, and Supt. Howell seconded, a resolution instructing the President to appoint a committee of three to take into consideration the Blair Bill now before Congress, and to report to this Association such action thereon as they deem wise. Carried.

Committee Appointed—President L. R. Fiske, Albion College; Prof. J. Estabrook, Olivet College; Prof. A. E. Haynes, Hillsdale College.

Adjourned.

Evening Session, Tuesday, December 29. 1885.

The informal reception tendered the teachers by His Excellency Gov. R. A. Alger and Mrs. Alger, assisted by Major and Mrs. Gil Osmun, was an altogether pleasant affair. The reception was held in the executive parlors, the teachers in the meantime enjoying a delightful social in the Senate Chamber.

At eight o'clock an audience that completely filled the Senate Chamber awaited the announcement of an exceedingly enjoyable entertainment.

The program was as follows:

Cornet Solo, "Whirlwind Polka," Prof. Joseph Spross, accompanied by Mrs. Carrier, pianist.

Encore, "I'll Take You Home Again."

Reading, "A Midnight Fantasy," Miss Sarah Rounds, Detroit.

The audience demanded Miss Rounds's reäppearance, and she recited "A Singing Lesson and how the Birds taught it."

Violin Solo, "Twelfth Air," varied by Ch. De Beriot, Mr. Geo. Spangler. Piano accompaniment by Mrs. Carrier.

The address of the evening was then delivered by Supt. B. A Hinsdale, of Cleveland, Ohio, on "President Eliot on the 'Public School Problem.'"

On motion of President L. R. Fiske, of Albion College, the Association extended its thanks to Supt. Hinsdale for his very able and discriminating address.

SENATE CHAMBER,
Wednesday, Dec. 30, 1885.

President McLouth called the association to order at 9 o'clock.

Prof. Joseph Estabrook, of Olivet College, conducted devotional exercises.

Supt. E. P. Church, of Greenville, was called to the chair. The first paper of this session was read by Mrs. Adele M. Garrigues, of Ann Arbor, on "The Personality of the Teacher." The discussion of this paper was opened by Supt. G. W. Gillette, of Manistee, and continued by Supt. Geo. Barnes, Howell; President L. R. Fiske, Albion College; Prof. F. M. Taylor, Albion College.

At this point, Supt. W. J. Cox, of Hancock, moved the following resolution, which was adopted:

Resolved, That we respectfully petition the State Supt. of Public Instruction to publish, in pamphlet form, the admirable paper on "The personality of the Teacher," by Mrs. Adele M. Garrigues, for distribution to all of the teachers and school officers of the State.

The committee appointed to consider the Blair Educational Bill, submitted through its chairman, Dr. L. A. Fiske, the following resolution which, on motion of Supt. J. W. Ewing, of Ionia, and seconded by Supt. E. P. Church, of Greenville, was adopted:

Resolved, That as the Teachers' Association of the State of Michigan, we endorse the promises of the "Blair Educational Bill," and respectfully urge its passage.

L. R. FISKE,
J. ESTABROOK,
A. E. HAYNES,
Committee.

(For *full text* of the report of this committee, see "Papers and Discussions.")

The committee on the State Reading Circle, appointed at the last meeting of this association, submitted its report through its chairman, Supt. W. S. Perry, Ann Arbor.

(The full text of this report will be found with the "Papers and Discussions" presented at this meeting of the association.)

Discussion led by Supt. L. R. Halsey, of Battle Creek; continued by Supt. I. N. Mitchell, Grand Rapids; Prof. D. Putnam, State Normal School; Capt. H. A. Ford, Detroit; Prof. S. D. Barr, Albion College; and Supt. D. Howell, Lansing.

Supt. D. Howell moved the following resolution as an amendment to the report of the committee on State Reading Circle; after which the report as amended was adopted.

Resolved, That this association appropriate the sum of fifty dollars to be placed at the disposal of the managers of the State Reading Circle, to be used in extending the work of the circle through personal correspondence.

Resolution carried.

President L. R. Fiske moved that the "State Council," contemplated by the "Report of Committee on State Reading Circle" be constituted as follows:

For two years—Prof. D. Putnam, State Normal School. Supt. W. S. Perry, Ann Arbor.

For one year—Prof. W. H. Payne, Michigan University. Supt. D. Howell, Lansing.

Prof. Austin George, State Normal School, moved that the name of Capt. H. A. Ford, Detroit, be substituted in place of that of D. Howell.

On division of the house the substitute was declared lost.

The original motion was then carried.

On motion, power was given to the "State Council" to fill temporary vacancies occurring in their body.

Supt. D. Howell offered the following resolution which was adopted:

Resolved, That the Michigan School Moderator be requested to become the medium of communication between the State and local boards of teachers' reading circles.

Wednesday Afternoon Session.

Association called to order at 2 o'clock by President McLouth. A communication received from Mrs. Mary T. Lathrop, president National W. C. T. U., asking the association to take action in the interest of the statute requiring the teaching of temperance physiology in all schools, was read by the secretary, and on motion was referred to the "Committee on Resolutions" for appropriate recommendation to the association.

Then followed a paper by Calvin B. Cady, Michigan University, on "A Problem in Education."

The discussion of this paper was led by Prof. S. D. Barr, Albion College, and continued by Prof. F. M. Taylor, Albion College.

The election of president for the ensuing year being declared in order, it was moved and carried that the association proceed to an informal ballot, and the subsequent balloting be confined to the three names receiving the highest number of votes on the first informal ballot.

After an informal ballot the association proceeded to take a formal ballot, which resulted in the choice of Supt. David Howell, Lansing, for president for the ensuing year.

The Committee on Nominations submitted the following report:

The Committee on Nominations would make the following report:

For 1st Vice-President—Supt. E. C. Thompson, Albion.

For 2d Vice-President—Supt. J. G. Plowman, White Pigeon.

For Secretary—Supt. George Barnes, Howell.

For Treasurer—Supt. A. C. Brower, Plymouth.

Executive Committee for three years—Supt. J. M. B. Sill, Detroit; Supt. S. G. Burkhead, Saginaw; Miss Ella Dean, Grand Rapids.

C. B. THOMAS,
F. M. TAYLOR,
LOIS McMAHON,
N. HAYDEN,
D. M. FISK,
Committee.

On motion the report was adopted.

On motion of Supt. W. S. Perry, it was voted that hereafter the first order of business, in the election of President, should be an informal ballot.

The Committee on Resolutions reported the following:

Your Committee on Resolutions respectfully submit the following:

1. *Resolved*, That this Association appreciates the efforts of the President and officers of the Association in the preparation of so good and instructive a program of exercises.

2. *Resolved*, That we gratefully recognize the courtesy of Gov. and Mrs. Alger in their contribution to the pleasure of the teachers at our annual gathering.

3. *Resolved*, That we extend our thanks to the Board of Control of the State buildings for the free use of the rooms of the State Capitol for the meeting of the Association.

4. *Resolved*, That the efficient coöperation of State Superintendent Nelson with the officers of this Association is gratefully acknowledged.

5. *Resolved*, That the assistance of those who have provided music for our entertainment is also gratefully acknowledged.

6. *Resolved*, That the President and Executive Committee of this Association be requested to arrange, in addition to the usual general program for the next meeting of

the Association, a program of a day's exercises to be devoted to primary education in the interest of both graded and ungraded schools, the sessions of this section to be consecutive, or to alternate with the sessions of the general Association, as the Executive Committee deem best.

7. *Resolved*, That we earnestly and zealously coöperate in carrying out the spirit and letter of the scientific temperance education law of the State.

MISS ETTA BOYNTON,
SUPT. W. H. CHEEVER,
SUPT. S. G. BURKHEAD,
Committee.

On motion to adopt the report, remarks were made by Messrs. George, Howell, Perry, Bennett, Barr, and Clark.

It was moved to amend the report by striking out the resolution concerning setting apart a day for sectional work. (Sixth resolution).

Remarks on amendment made by Messrs. Bellows, Pattengill, Fiske, Perry, King, Stephens, Taylor, Lucas, Rankin.

Pres. D. S. Stephens moved the following amendment to the amendment, which was declared out of order:

Resolved, That one day of the next meeting of this Association be devoted to meetings in sections, having regard to the several leading departments of instruction, and that a program be prepared accordingly.

The first amendment was then carried, and the sixth resolution stricken out. Pres. D. S. Stephens then moved his former amendment.

Prof. Austin George moved the following substitute:

Resolved, That the executive committee be recommended to prepare for the next Association a program having the equivalent of one day's work devoted to primary and ungraded schools.

Substitute carried.

The report of the committee on resolutions, as then amended, was adopted.

Mr. Erwin F. Smith introduced the following, which was adopted:

Resolved, That the important features of the discussions accompanying the papers and addresses given before this Association, which are now lost, should be preserved, and that hereafter, for this purpose, the executive committee be authorized to employ a short-hand reporter whenever, in their opinion, the condition of the treasury will warrant.

On motion of E. S. Hopkins the secretary of the Association was instructed to transmit to U. S. Senator T. W. Palmer a copy of the action of this Association on the Blair Educational Bill.

President-elect Howell was then called to the chair and introduced by the retiring president.

President Howell then addressed the Association in a few well chosen words.

The treasurer submitted the following report, which was adopted:

REPORT OF THE TREASURER.

1884.	*Debit.*		
Dec. 31	To amount from former Treasurer		$18.
1885.			
Dec. 30	To annual dues of members		151 50
1885.	*Credit.*		
Oct. 9	By cash to W. S. George & Co	$39 89	
9	By exchange		
9	By cash to Wesley Sears (Secretary)	10 70	
9	By exchange	10	
Nov. 28	By cash to President McLouth	20 00	
28	By exchange	10	
Dec. 29	By cash to W. S. George & Co	7 50	
30	By cash to Supt. B. A. Hinsdale	25 00	
30	By cash to Secretary Sears	1 05	
30	By cash to Miss Rounds (Readings)	10 00	
30	By cash to H. R. Pattengill, Music, etc	23 15	
30	By cash on hand	194 91	
		$332 55	$332 55

Respectfully submitted,

C. T. GRAWN,
Treasurer.

Moved and carried that the Secretary be instructed to furnish copies of the Proceedings as follows:

To the officers, ten copies each.

To those presenting papers or addresses, five copies each.

To members, two copies each.

President Howell called attention to the fact that his election to the Presidency caused a vacancy in the Executive Committee.

On motion Prof. C. F. R. Bellows was chosen to fill said vacancy.

On motion the Association adjourned.

L. McLOUTH,
President.

WESLEY SEARS,
Secretary.

In reply to information sent U. S. Senator O. D. Conger, concerning the action of this Association on the Blair Education Bill, the Secretary received the following response:

UNITED STATES SENATE,
Washington, D. C., Jan. 22, 1886.

WESLEY SEARS, ESQ.,
Sec'y State Teachers' Ass'n, Flint, Mich.:

DEAR SIR,—Your letter of January 15th, enclosing resolutions in favor of the Blair Education Bill, is duly received.

I shall be pleased to assist in the passage of this or a bill with a similar object, and am pleased to have the suggestions of the Association on the subject.

Yours truly,

O. D. CONGER.

LIST OF MEMBERS, 1885.

Names.	Residence.
Andrus, W. M	Elk Rapids.
Arbury, F. W	Fentonville.
Ballou, J. M	Otsego.
Barnes, George	Howell.
Barr, S. D	Albion.
Beal, W. F	Agr'l College.
Bellows, Mrs. C. F. R	Ypsilanti.
Bemis, C. L	Portland.
Bennett, A. H	Bangor.
Biscomb, Jos	Grand Rapids.
Boynton, Miss E. S	Jackson.
Bradner, Miss Mittie	Redford.
Bradt, E. F	Hartford.
Bradt, Mrs. E. F	Hartford.
Briggs, E. L	Eaton Rapids.
Broesamle, G. H	Imlay City.
Brooks, W. H	Ypsilanti.
Brower, A. C	Plymouth.
Brown, Hugh	Pontiac.
Burkhead, S. G	Saginaw.
Burnham, S	Vicksburg.
Cable, F. S	Chicago, Ill.
Cady, C. B	Ann Arbor.
Chaffee, Mrs. C. G	Flint.
Cheever, W. H	Three Rivers.
Church, E. P	Greenville.
Churchill, Lemuel	Three Oaks.
Clapp, H	Vicksburg.
Clark, C. E	White Rock.
Clark, T. S	Ortonville.
Clizbe, W. D	Lapeer.
Cogshall, Jas. H	Fruitport.
Cole, C. H	Hastings.
Cox, W. J	Hancock.
Dees, Miss Joanna	Jackson.
Demmon, I. N	Ann Arbor.
Demorest, E. J	West Bay City.
Dickie, S	Albion.
Downie, N. L	Muskegon.
Ellis, W. A	1347 Mich. ave., Detroit.
Elms, Miss Florence	Lansing.
Estabrook, J. B	Olivet.
Estabrook, J	Olivet.
Everest, Louie	Niles.
Ewing, J. T	Petoskey.
Fall, Delos	Albion.
Fischer, E. M	Marine City.
Fish, Mary E	Greenville.
Fisk, D. M	Hillsdale.
Fiske, L. R	Albion.
Fry, W. T	Chicago, Ill.
Gaige, F. S	Concord.
Gardner, E. M	Grand Rapids.
George, Austin	Ypsilanti.
Gephart, Hattie	Niles.
Gibson, L. J	Niles.
Gillette, G. W	Manistee.
Gillette, Mrs. G. W	Manistee.
Ginn, W. C	Hillsdale.
Glover, Fannie E	Niles.
Goodison, John	Ypsilanti.
Gorton, L. G	Detroit.
Graves, M. O	Ann Arbor.
Greeson, W. A	Grand Rapids.
Griffith, E. L	Laingsburgh.
Hahn, Millie	Niles.
Haigh, Richard	Detroit.
Hall, A. S	Cadillac.
Hall, C. B	Detroit.
Halsey, L. R	Battle Creek.
Hayden, N. H	Hudson.
Haynes, A. E	Hillsdale.
Hazard, J. W	Fulton.
Hewitt, W. C	Cassopolis.
Hickey, Mrs. A. D	Lansing.
Honey, W. H	Caro.
Hopkins, E. M	Elm Hall.
Hosford, O	Olivet.
Howell, D	Lansing.
Hume, Miss M. A	Lansing.
Humphrey, J. W	Wayland.
Hutchinson, Ella	Ionia.
Jenkins, Charles	Mason.
Johnson, Charles	Ann Arbor.
Joslyn, Lee E	West Bay City.
Kendall, C. N	Jackson.
Kendall, F. M	Jackson.
King, H	Olivet.
Laird, Samuel	East Tawas.
Laisch, W. M	Frakenmuth.
Lane, Miss H. L	Webberville.
Legg, Peter	Bismarck.
Lovell, Miss A	Grand Rapids.

LIST OF MEMBERS.—*Continued.*

Names.	Residence.	Names.	Residence.
Lucas, J. L.	Niles.	Russell, E. M.	Paw Paw.
Manning, J. W.	Flint.	Sage, W. V.	Gobleville.
Marble, M. M.	Lansing.	Schultz, Mrs. C. A.	West Bay City.
Mayhew, Emma	Detroit.	Scott, M. F.	Grand Rapids.
Mayhew, Ira	Detroit.	Sears, Wesley	Flint.
McCall, J. M.	Ithaca.	Seed, Wm. F.	Cass City.
McCurdy, Charles W.	Sand Beach.	Seibly, Emma	Lansing.
McDonald, Marion	Mason.	Sherwood, Alva	Three Rivers.
McLauchlin, A. L.	Chicago, Ill.	Shuart, W. L.	Lowell.
McLaughlin, O. M.	Holt.	Sill, J. M. B.	Detroit.
McLouth, Lewis	Agr'l College.	Simmons, J. W.	Dowagiac.
McMahon, Lois	Ypsilanti.	Smith, Clara	Niles.
Mead, J. M.	Cedar Springs.	Smith, Cyrus	Chicago.
Meddaugh, M.	Sebewaing.	Smith, Erwin F.	Lansing.
Millard, J. B.	Belding.	Stephens, D. S.	Adrian.
Millspaugh, Miss Helen J.	Romeo.	Strehle, Jos.	Three Oaks.
Mitchell, I. N.	Grand Rapids.	Strieter, Fred	Frankenmuth.
Morris, S. T.	Litchfield.	Sutton, Nellie	Detroit.
Osband, Mrs. Lucy A.	Ypsilanti.	Swain, A. J.	Stanton.
Osband, Will W.	Ypsilanti.	Taylor, F. M.	Albion.
Osinga, G. A.	Otsego.	Tedman, A. S.	S. Saginaw.
Palmerlee, C. E.	Dryden.	Thayer, Miss Libbie	Elk Rapids.
Parker, P. M.	Chelsea.	Thomas, C. B.	East Saginaw.
Parmenter, Levonia	Corunna.	Thompson, E. C.	Albion.
Pattengill, H. R.	Lansing.	Thompson, O. D.	Romeo.
Perry, W. S.	Ann Arbor.	Tibbits, H. S.	Leslie.
Pickell, Charles W.	Ludington.	Tucker, N. W.	Laingsburgh.
Plowman, J. G.	White Pigeon.	Wagner, J. L.	Grand Ledge.
Plunkett, E. M.	Vernon.	Walker, Geo. W.	Adrian.
Putnam, D.	Ypsilanti.	Warner, E. C.	Ypsilanti.
Putnam, Emma	Williamston.	Warner, W. W.	East Saginaw.
Race, W. G.	Lansing.	Wheelock, Clara	Lyons.
Rankin, H. C.	Olivet.	White, George S.	Jackson.
Rice, Miss S.	Fort Gratiot.	Whitney, S. E.	Detroit.
Richards, N. A.	St. Louis.	Wickham, F. O.	Howard City.
Ried, James	Bay City.	Williams, E. C.	Coldwater.
Rogers, J. M.	Schoolcraft.	Williams, Josie	Ionia.
Rogers, J. Sumner	Orchard Lake.		

PRESIDENT'S ADDRESS.

SCHOOL DIFFERENTIATION.

BY PROF. LEWIS M'LOUTH, OF THE STATE AGRICULTURAL COLLEGE.

Members of the Michigan State Teachers' Association:

When you look over the long line of distinguished teachers who have filled the office of president of this association for the third of a century of its existence, you will sympathize with my embarrassment as I undertake to speak to you. Many of these men, distinguished really, and not by mere rhetorical courtesy, I have been wont to look to, ever since I began my humble career, as a boy always looks up to the first men he ever meets who are eminent in ability or in position. Such men as Welch and Gregory and Winchell and Abbot and Angell and Fairfield, some of whom were my teachers, and all of whom have been or still are at the head of leading colleges, have discussed from this chair great questions in the masterful way of great men; and others of no less note, who have made their impress upon educational thought, have here delivered their utterances.

At the risk of being judged by too high a standard, but without further apology, I invite your attention to a few thoughts upon what may as well be designated *School Differentiation.*

In the lowest animal forms there is probably but one sense, that of touch, and every part of the body is equally sensitive. Under the provoking influence of environment, however, the little creature comes to use some parts of its body more and more for touch, until after many generations of active schooling these parts become more sensitive, and feelers or fingers are developed as special organs. Some of these finger-nerves, then, by the constant urgency of use, coiled and expanded over delicate and protected surfaces, become at last, after many other generations, so etherialized in their sensibilities that they can feel and distinguish the fine particles that float in the air, and the olfactory organs and sense are acquired. Again, some of the more sensitive nerve fibers, by the slow evolution that comes of selection and use, become at last cognizant of still more delicate impressions and are able to note and record the slight movement of air vibrations, and the sense of hearing is gained. At last by a long training of powers, improved and transmitted, generation after generation, some of the more delicate nerve-tips become so highly endowed and gifted with such rare powers that they can catch and sift the subtile tremors of the light-bearing ether, and vision is gained as the highest function of sentient nerve matter. A creative intelligence, we believe, planned this marvelous growth and directed the successive steps of development by His own primal purpose; but the *process*, the successive changes, by which a formless clot of living matter comes to have specialized organs is called *Differentiation*. An analagous influence is at work in the *social body*,—a similar tendency to differentiation by which parts, unfolding from simple into the complex, come to have special powers and functions.

In the earliest forms of human society all its members are hunters, seeking merely the coarse means of supplying what hunger and thirst demand, or the shelter and security which a tree, a hill-side, or an over-hanging rock affords. But by one of the first steps in social differentiation, while some remain hunters and warriors as before, others become house-tenders, or tillers of the soil. With this simple division of labor comes increased skill in each class, and further division and further progress is made, until that advanced condition is reached in which hunters, fishermen, shepherds, tillers of the soil, weavers, and cooks become distinct classes. Then some of the more skillful and industrious make or acquire more of their special commodities than they need, and barter or exchange comes into practice, and the class of carriers and merchants is differentiated. And so, by gradual and long continued processes of specialization, based upon the obvious advantage of the division of labor, the various trades, and occupations, and professions have been evolved as organs of the social body.

At first, however, and even after considerable steps had been taken in social progress, the parents were the only teachers. The mother taught her daughter the use of shuttle and needle, to dress the food and to cook it; the boy learned from his father to shape the bow or to bend it,—to braid and set the nets and to build their huts,—while he also learned from his father's lips their "folk-lore,"—the legends, traditions, and faiths of their tribal ancestors. In all this, however, there was hardly more of conscious teaching than is displayed by the northern eider-duck when she instinctively teaches her young to dive by plunging into the depths of the sea with a chick under each of her wings.

After awhile it was seen that the advantage of a division of labor was as great in the training of the young as in carpentry or shoemaking, and the *paidagogós*, or child leader, was evolved; though even then—and long after—the priest, the lawyer, and the physician still combined in their respective offices the function of higher teaching. The process was a slow one, and there is not time even to trace in outline the successive stages, but, at last, as the latest and richest fruit of social differentiation, the *school* and the *teacher* have become as distinct organs of the social body as the hand and the eye are organs of the natural body.

The school, then, is a differentiated organ that advancing civilization has developed, and which, in turn, itself contributes to still further advance the civilization that gave it birth. But to do this its own progress must be as assured and as continuous as the advance of civilization itself.

When the eye, as a bodily organ, was first evolved, it could only distinguish light from darkness; but its specialization continued until the most delicate tints of color are recognized, and the faintest gradations of shade are translated into form, size, and distance. So the school, at first like the imperfectly developed eye, which could only "see men as trees walking," was a general organ of civilization, doing the simplest work. But differentiation went on,—specialization could not stop. Grading, by which pupils are so assorted that their wants can be better and more economically supplied, was one great step in school differentiation. The division of the higher grades by departments, so that teachers of special knowledge could each contribute by special skill to the varied ends of education, was another step in the application to the school of that beneficent principle of the division of labor which has been such a mighty agent in human progress. The introduction of drawing into our schools, of vocal music, of history, of rational grammar, and of human hygiene is another grand step in this direction. Better teachers, better methods of governing, better school-houses, better furniture, better books, and a better public sentiment towards the teacher and the school are long steps of progress that many of us have lived to see since our own school days.

The establishment of special schools is another marked instance of differentiation. Teachers' schools, business schools, dentists' schools, agricultural schools, schools of pharmacy, schools of the veterinary art, music and other art schools, and lastly manual training schools have come to take their places beside the older schools of divinity, medicine and law. Almost everything is now taught in special schools,—sewing, nursing, cooking, riding, swimming, as well as "dancing and deportment."

But with all this diversity of special schools, which are differentiations of the general school, and whose function is to teach occupations rather than to cultivate power, to train rather than to develop,—is it not true that in the general school itself there is too little tendency to variety? Have even the best of graded and high schools sufficient power of adaptation to the more varied wants of the pupils of to-day? To you, members of this association, is the question put as to those whose experience and wisdom are to determine, and whose influence is to accomplish.

Education has for its end the development and training of all the human powers to their fullest extent, and into their fullest efficiency for the duties of life, the only limitation being the limitation of the pupil himself.

Now the human powers are exceedingly varied, and with the growth of the race they are becoming constantly more varied. Differentiation works also its peculiar work in the human mind. New lines of thought are stretching out before us, new sciences are being developed, and new fields of activity opened. Why, there are no longer any naturalists or natural philosophers, as of old, but instead, entomologists, and ornithologists, and ichthyologists, and osteologists, and histologists, and paleontologists, and structural botanists, and cryptogamic botanists, and the chemist of the carbons and the physiological chemist, and electricians and specialists in mechanics and dynamics, and in light and in heat and in sound. So the learned professions are becoming similarly subdivided into specialties. Doctors are occulists and dentists and gynecologists and neurologists and surgeons, and these all split into at least two schools of practice, while there are quacks of all specialties in both schools. Lawyers are pleaders and counselors, and criminal lawyers, and admiralty lawyers and patent lawyers and corporation lawyers. The civil service promises, too, if the politicians do not prevent, to produce a great many classes of special administrative officers.

Even the mechanical trades show a like tendency to split up into specialties. Masons are now plasterers, brick-layers, stone cuttors or stone masons. Horseshoeing is now a trade quite distinct from general blacksmithing; machinists are turners, fitters or finishers; and agriculture is divided into horticulture, fruit culture, dairying and stock raising. So, too, in mercantile affairs. The time was when the merchant vended over the same counter dry goods, millinery, boots and shoes, hardware and groceries, both wet and dry; now these different kinds of merchandise are divided up among a half dozen special dealers. Besides, since the first third of the century the method of conducting all mercantile affairs, all interchange of commodities, and even manufacturing industries, has been revolutionized by the introduction of improved and enlarged banking and exchange systems, clearing houses, mercantile agencies, express carriage, increased and cheapened postal facilities, postal currency, quick freight transit, the telegraph and the telephone. The differentiating process that has been going on amongst us during the last forty years has created many occupations before unthought of. Railroad building and managing of all kinds, mining by aid of the air drill, the diamond drill and hydraulic processes, Bessemer steel, iron ship building, farming by machinery, stock raising on what we used to call the Great American Desert, the business in mineral oil,—which is made to flow for hundreds of miles to market instead of being carried,—oil refining,—which has rendered obsolete the whale fishery—telegraphs, telephone, electric lighting, and the transmission of power by electricity,—these have furnished a multitude of new occupations since the easy remembrance of many.

In this period, too, the marvelous advancement in the natural sciences has opened up new lines of thought and greatly widened the scope of human knowledge. Chemistry has been rebuilt as a science and greatly enlarged; the docrine of the correlation and the conservation of forces has become a fixed part of our mental furniture; heat, light and electricity have disappeared as "imponderables," and come back to us as forms of motion; the spectroscope has been discovered, and has shown its power to surpass the microscope in the universe of the little, and the telescope in the universe of the great; and lastly, I am impelled to say, the great doctrine of evolution has come to modify all our opinions, to open our eyes wider—not to shut them—to the marvels of God's doings, and to give us a form around which material phenomena—and mental, too—can crystallize into an intelligible regularity.

As a consequence of these new and greatly diversified occupations and habits of thought there is now among our people a greater diversity of taste and of talent than ever before, and all the tendency is to intensify these differences. A generation or two ago the school children were nearly all the sons and daughters of those who for the most part were engaged in the one rough struggle of subduing forests, of smoothing down the asperities of nature to make them decently comfortable homes. Just one monotonous thought occupied their minds. The school children of to-day come from a greatly more varied parentage, and from homes of vastly differing conditions. Some of these children have since infancy been tumbling about in libraries, among books and pictures. Some of them have inherited strong tastes for literature, for music and other forms of art, some for business and some for mechanical pursuits. They so differ from each other now in mental habits, traits and capabilities that they cannot all be made to fit into the same old Procrustean trundle-bed.

The children are not all of the same mental, any more than they are of the same physical, stature and temperament,—not nearly so much alike now in this country as they were thirty years ago before the new blood of foreign stocks had so generally flowed in and mingled with our own. And these tendencies toward the heterogeneous are constantly increasing.

Now these changes in the characters of our pupils demand a corresponding change or rather enlargement of our school facilities. To develop properly such diverse powers, and to train them for so many widely differing occupations, it would be strange indeed if the same old courses were best. Do not the new thoughts, the new tendencies, the new mental idiosyncrasies demand additions to our educational apparatus?

Forty years ago, in this country, the uneducated became laborers, the educated became clergymen, lawyers, doctors or teachers of the higher grade, and there were hardly any intermediate ranks. Reading, writing and arithmetic were deemed enough for the one, and the old college curriculum of Greek, Latin, pure mathematics, and the metaphysics of the "schoolmen," served its purpose very well as a ground work of preparation for the learned professions. There are now numerous other and intermediate classes to be provided for. The times are certainly changed; are we sufficiently changed in them?

'Tis true that in all this movement the schools have not stood still. By as much as the modern reaper is an improvement upon the old-fashioned grain-cradle, by so much do the primary schools of to-day surpass those of my own childhood; and the scope of the higher schools has also certainly been enlarged. Has this enlargement, however, kept pace with progress in other lines? A systematic study of English and of the other modern European languages has, it is true, found some place in our courses of study; still there are to-day five times as many professors of Latin in our higher schools as of English,—just as if nineteen Christian centuries had poured no floods of wealth into human literature, into the stream of human thought. There are five times as many professorships of pure mathematics as of all the modern languages of Europe;—just as if Germany and France and Italy did not possess two-thirds of all the learning of the world. It is true that the physical sciences are year by year asking and receiving more attention; and yet a couple of terms for chemistry and physics are deemed ample time in most of our schools for the two sciences which more than anything else have created that which most distinguishes the present century, while a whole year is still given to Virgil's barbaric poem. More time is given to Cæsar's bridge-building exploits than to all the triumphs of modern engineering. Less time is given to human physiology and hygiene—the science of living—than to arithmetical puzzles and problems that nobody ever hears of outside of the school room. More of our pupils can give an account of the Punic wars than can explain the structure and action of the steam engine, which has given to every man in Christendom another arm to the two that nature gave. Jason's Expedition after the Golden Fleece is better known than Humboldt's travels. The mythic heroes, Hector, Ulysses, Romulus, and Numa Pompilius are much more familiar characters to our school children than Watt, Stephenson, Fulton, Morse, Elias Howe and Bell, who have given us the steam engine, the locomotive, the steamship, the telegraph, the sewing machine, and the telephone. Boys who cannot name the Presidents can recite the emperors of Rome, from Augustus to Constantine. A good many more of you have learned the number of feet in a heroic verse than the number of teeth in a cow's head, though to the average plodding mortal the one knowledge is as valuable for discipline or for use as the other.

Differentiation in the schools has not, I fear, kept pace with differentiation in civilization. The schoolmaster, like the priest, is conservative; he is inclined to hold on to the old as safest.

There was a time when all the mental discipline the highest schools could offer could only be found in the study of mathematics, metaphysics, Latin and Greek; but because upon such intellectual food men were nourished into greatness, it does not follow that as great or greater may not grow on some other diet. The wheat which our forefathers sowed from the open hand and reaped with sickle and threshed with swinging flail and winnowed with clumsy fans and ground into flour between two stones, our good grandmothers made into sweet and wholesome bread that nourished strong muscle and thinking brain; but that is surely no good reason why the modern husbandmen, holding fast to the good old ways that have served the world so well, should refuse to employ gang plows, seed drills, steam harvesters and threshers and the improved roller grinding mills.

Because some of us may retain in our memories a dim picture of a mother long ago who sang to her children while she sorted the fleece and carded the featherly rolls of wool, and deftly spun the threads and reeled the skeins and knitted or wove and stitched with many a careful stitch the warm garments of our childhood, we therefore none the less, but rather more, should welcome and value the spinning frame, the power loom and the sewing machine.

But this is not quite the point I wish to make. I do not propose to raise objections to the old or to the present courses of study so much as to ask the question whether the changed condition of things does not now demand a wider range of subjects, a greater flexibility among them, a greater power of adaptation to the varied tastes of our pupils and to their probable life vocation. Why educate all, or attempt to educate them, as if there were no differences in their present tastes and capabilities, as if all were destined to the same trade or profession? Why insist that the highest and best training is linguistic training? All educated people now-a-days do not need to be talkers,—some must be doers. In this country the prevailing opinion still seems to be that to be able to make a public speech is the one mark of an educated man, and the aim and end of all education. The notion is of course fallacious, but it is not new by some thousands of years. After Moses had been chosen by God to lead the children of Israel from Egypt, and after assurance of divine aid, even then, with proverbial "meekness," he begged to be excused from the task on the ground that he couldn't make a speech. "I am not eloquent," said he, "I am slow of speech and of a slow tongue." Moses seemed to think that the waters of the Red Sea were to be rolled back by roars of eloquence, that the enemies of Israel were to be vanquished by the thunders of the orator's voice, while his persuasive tones were to call the manna down from heaven, and the wind of his lips "bring quails from the sea." Many are still of this opinion; but the Lord said, "Who hath made man's mouth?" Let Aaron, the Levite brother, do the talking,—he isn't good for much else.

From that day to this not many great leaders have been chosen for their eloquence.

Now, what I would make my humble plea for is, not so much that there should be less of this or more of that, but that in the bill of fare each pupil shall have what is best for him, as his tastes and talents indicate. All should learn to read and to speak and write good English, should master the elements of number, a little home geography and the laws of health. Beyond these the work of the school should bend to the child's individual traits of mind. I am sure there would be fewer dunces in such a school. What is the use of keeping a girl who has no sense of numbers or of their relations cudgeling her helpless brain over arithmetical perplexities when she might become proficient in music or drawing or botany or history? Is such a course any more sensible than the opposite one of keeping a girl vainly pounding a piano for years, while the neighborhood is rendered uninhabitable and a good cook or seamstress is spoiled? Why continue to insist upon algebra for a boy who has no head for it, but who in the same time might really surpass in grammar, rhetoric or the languages? Some people have little more sense or appreciation of geometrical forms than a blind man has of color; is not the attempted study of geometry a waste of time for such? When a pupil has begged pitifully to be excused from a study for which he has positively no capacity, the teacher's answer has been, "O, that is the very thing you most need," as if the purpose was to cultivate his weaknesses rather than his strength. That teacher had not yet learned—it takes some of us a long time to learn—the meaning of that saying of the Great Teacher: "What man is there of you, whom, if his son ask bread, will he give him a stone? Or if he ask a fish, will he give him a serpent?"

We do not so with the child's bodily food; in this we let the child follow his natural and unperverted tastes. All school studies may be good for some, but all are not best for all. The child's tastes and proclivities should be studied, and then let him be fed upon that kind of intellectual food which a hearty intellectual appetite craves. God didn't consult the schoolmaster's judgment when the child was created, and so the schoolmaster has had to make himself very diligent in correcting the blunder of giving to different children varied tastes and different capabilities.

Many of you may very likely call up from your own observation a case of two boys, sons of the same State, and, it may be of the same parents; one of these has a genius for books, the other a genius for things. One easily masters literatures, languages, abstractions,—the shadowy existences in books,—but has no talent for the objective. The other is dumb and dull at all book lessons; but his eye sees and quickly measures all material forms, his brain is cunning at devising and his hand deft at executing all interacting combinations of matter and of material agents. The one's thoughts are introverted toward the ideal, the immaterial; the other's are outward turned towards the tangible, the audible, the visible. The one easily gathers the learning of the books, the other as easily the teachings of all animate and inanimate nature. Now shall the State in her schools foster the one and forget the other? Shall she furnish to the first every facility for the cultivation of his powers, while to the other, as richly, though differently endowed, she offers nothing,—except such a repast as the fox offered the stork? Shall the State offer to conduct the one along the paved educational avenue that leads to honor and to affluence, while to the other she offers nothing but a career of dull toil whose wages is penury? Justice and wisdom alike forbid. These two boys stand before the State with equal rights, the services of both may be made of equal value to themselves and to the State. Both *must be educated,* and if educated at all, then it must be along the lines of their respective tastes and talents.

Felix Adler lately exhibited some plaster medallions and other specimens of modeling, of real artistic quality, made by boys gathered from the streets of New York,—children of the ignorant and dissolute,—and who in some cases were almost totally incapable of ordinary school work. Such—and there are many grades of them everywhere—are not reached by any but the most flexible and varied of school curricula. Let, then, the school diet be of such variety that there shall be something for every stomach. It is foolish to attempt to make all our girls musicians or linguists,—the culinary art may profitably interest some of them. It isn't wise to try to make doctors or lawyers or teachers of all our bright boys,—if they have a bent that way they will follow it,—for there are other vocations and professions equally honorable and for which they may have special aptitude. Besides the great cities are already full of doctors who can only live by quackery, and of lawyers who must steal or starve.

It is reported that Bismarck, not long ago, spoke with contempt of the "proletariat of graduates" in Germany as being an uneasy and factious nest where revolutionists and nihilists are hatched. Educated along lines that run athwart their native talents, and graduated into professions where for them there can be no careers, they become soured and strive to correct the evils of society by destroying it.

Now, ladies and gentlemen, I have doubtless in this rambling talk said some things that many of you will not endorse as true, and possibly because they may not be true; but of course I alone must be held responsible for my own utterances. No one of this association can be held to an account for what opinions another member may hold or express. This address is not an official utterance.

On the other hand, I trust that some things I have said you will accept as true and profitable; for I have studied along with you, our experiences have been common, and to many of you as wise instructors do I confess the indebtedness of the pupil. At any rate I am sure you will all assent to the general proposition I have been able but feebly to enforce: That education should be for *each* rather than for all, that it should treat the *individual* and not the *mass,* that it should be the best that each is capable of receiving, and that its aim should be to make the *most of each,* and *best to fit each for his proper sphere in life.*

PRESIDENT ELLIOT ON PUBLIC SCHOOL PROBLEMS.

ADDRESS OF SUPT. B. A. HINSDALE, CLEVELAND, OHIO.

Mr. President and Teachers of Michigan:

It gives me great pleasure to attend this annual meeting of the Michigan State Teachers' Association; the call to contribute an address to its discussions, I can count nothing but a mark of honor. My personal acquaintance with your State is limited, but I have long been familiar with the reputation of her common schools, her State University and her teachers. Cultivated men all over the country know full well that there is much in her educational history that is instructive and inspiring. No chapter in the admirable volume which your distinguished jurist, Judge Cooley, has contributed to "The Commonwealth Series" is likely to be read with more interest and admiration than the one entitled, "The State provides for universal education." At least such has been my own experience. Allow me, therefore, Mr. President, to congratulate you and the Michigan teachers gathered in this annual convention, on the just fame that your State has won in the broad field of educational enterprise.

When the call to this meeting reached me, I was watching the ripples in the educational journals caused by one of the boldest and frankest educational utterances that I have read for many a day, viz.: the short address made by President Elliot, of Harvard University, at the annual dinner of the Schoolmasters' Club of Boston, at the end of October; and it occurred to me that I might render you a small service by making it the subject of my own discourse. President Elliot's abilities, position, policy, and courage of his opinions always give importance to what he says on educational matters. Perhaps I have not made the happiest selection of a theme; but you will at least remember that in the commonwealth of American education we have no tribunal as a bench of judges, to pass authoritatively on questions; no digests of opinions or reports of cases that settle causes and prevent further argument. On the contrary, causes are always open to him who chooses to argue them. No doubt we make foolish experiments in consequence; but these are not so costly in the end as it would be to close causes to discussion, and to settle questions by referring them to registered wisdom. Moreover, the spirit of our large educational gatherings is so catholic, and the range of ability, culture, and experience represented in them so considerable, that almost any topic, even if it touches education only indirectly, is pretty sure to awaken interest.

The character of President Elliot's thinking on education, and the policy that he has pursued at Harvard, are so well understood that, in the beginning, I need only say this in general—each distinct point in his address is an outcropping of his favorite principle of election and comprehension. In discussing these points I shall often pass beyond the limits of what he has said, to consider related questions. This is the paragraph in which President Elliot states and combats what he calls the "Calvinistic theory" of education:

> "At a meeting of teachers which I attended last week, a distinguished man burst out with a completely irrelevant statement that nothing was good for training that was not hard. Now, I want to say that the view which ascribes usefulness to mental exercise only when it is repulsive and distasteful to the scholar, needing a dead-lift of the will, is to my thinking the absolute opposite of the truth with regard to mental training. No subject is good for the training of a child four years old, or twelve, or eighteen, in which the child or youth is not capable of achieving something, capable even of decided success, and of winning that enjoyment and satisfaction which come with achievement and success. If we would divide subjects into profitable and unprofitable we must, I believe, always put in the profitable class those subjects which the boy enjoys, and in the unprofitable class those subjects for which he has no capacity and in pursuit of which he gets no enjoyment. A subject is good for a child precisely in proportion to his liking for it, or in other words to his taste and capacity for it." *

In the outset we should boldly mark one capital distinction that much current writing and talking on educational and kindred topics tend to confuse, viz: Work is not play. Ingenious essayists and lecturers sometimes almost delude us into believing, at least for the moment, that they are, or may be made, the same thing. They both involve activity, work commonly more than play; but they differ in the ends to which the activity is directed, and in the mental attitude of those who put it forth. Work is an act, or a series of acts, in the line of one's occupation or duty; play is resting from such acts. The synonyms of the one word are "labor," "toil," "employment;" of the other, "pleasure," "amusement," "diversion." Work is girding up the powers for serious effort; play is their relaxation, at least their diversion from ordinary pursuits. "The end of work," says Aristotle, "is to enjoy leisure." Both work and play appear in a well-ordered life; both have disciplinary value; both are related, though in quite different ways to education; however, my present object is not to assign to each its precise sphere or nicely to determine their relations, but to emphasize the fact that neither one can be made to answer the purposes of the other.

In educating children the attempt has sometimes been made to put work in the place of play, and sometimes the attempt to put play in the place of work; and it would be hard to say which has led to the greater failure. The first attempt is the blunder of practical teachers only, the second is the blunder both of teachers and of writers on educational theory. So sober a man as John Locke not only proposed to combine instruction and sport, but said nothing like work should be laid on children; the great use and skill of

---

* The extracts are made from an article by President Elliot in "The Popular Educator," November, 1885. This article and the after-dinner speech were the same in substance.

a teacher in the case of small children being, he affirmed, to make all as easy as he can.*

No doubt play comes before work in the order of development; no doubt children learn a good many useful things in their sports; no doubt the kindergarten has a message for the primary teacher; but failure will in the end attend every attempt to make the school room a play room and the course of study a series of games. Even in a school where the aim is to teach only through amusements, children divide the exercises set for them into two classes, making work of some and play of others. Moreover, if it were possible to clothe all work in the habit of play it would not answer the ends of complete discipline. John Maynard did not think it play when, in smoke and flame, he stood at his wheel until burnt to a crisp. The sentry does not think it play as, in cold and storm, he paces his weary beat at midnight, keeping watch over the sleeping army that has been given to him in trust. The nurse, who, in hospital or home, watches alone over her feverish and delirious patient in the small hours, does not think it play. Nor, again, does the pilot, the sentry, or the nurse learn his fortitude and devotion spinning tops, flying kites, or playing lawn-tennis. To be sure tops and kites and tennis have their place, but the ability to gird up the powers of the body and the mind for supreme efforts, or even for common efforts, come from a different regimen. It was in a thorough school that St. Paul learned to say, "For necessity is laid upon me." And we may be very certain that

> "The meekest of saints will find stern work to do,"

no matter whether "the day of the Lord is at hand" or not.

It may be replied that men sometimes find their "play-spells" in severe exertions of a particular kind, as solving problems in mathematics or physics. Such declarations are often to be understood rhetorically. Still it must be said that long application to given things may produce a second nature that speaks a very different voice from the first nature. Work may become a disease. Lord Chief Justice Ellenborough sat on the bench until he said the greatest pleasure of his life was to hear Follett, then a young barrister, argue a point of law. Again great interest in a subject, and great enthusiasm in its pursuit makes it attractive and pleasant. We read that "Jacob served seven years for Rachel and they seemed to him but a few days, for the love he had to her." But plain, unsophisticated common sense holds work and play antithetical. Even so devoted and resolute a lover as Jacob would have preferred to win his bride in an easier way than serving seven years as a herdsman.

Now, I do not charge President Elliot with confusing work and play. Such confusion is not necessarily involved in anything that he says; but so much such confusion exists, that a bold delineation of the two kingdoms seemed a proper prelude to taking up his real point.

The President tells us, in effect, that studies should be made interesting and easy, school pleasant and attractive. This is indeed very valuable advice. The unpleasant associations that still cling around the words "pedagogue" and "master" are survivals of that period in educational history when it was common to make school studies exceedingly hard, school discipline exceedingly severe, and school life exceedingly forbidding. The "Calvinistic theory" was then in its glory. What is left of this regimen is now passing away so rapidly that we need to give much more attention to what is taking its place than we do to hastening its passage.

---

* See Quick's "Educational Reformers," Cincinnati, p. 86.

The child has a spontaneous nature that should be harnessed to studies and to the whole work of life. Automatic attention is that state of the mind in which its energy is given to a thing from some native affinity or attraction; volitional attention, that state in which its energy is given by an act of choice. The development of volitional attention is one of the highest results of discipline. Now in training the child the spontaneous attention must be rallied to the support of the volitional, which is weak or rather does not at first exist at all; but as time goes on the volitional attention should grow and become more and more independent of the spontaneous. Humor has been likened to the lever by means of which we raise great weights with a small force. Love and enthusiasm are also powerful motors. There is a large suggestion for the teacher in the fact that a little boy who complains bitterly of the weariness of walking will, when put astride of his grandfather's cane, and told that it is a horse, scamper away all forgetful of his own bitter complaints. But somewhat of life consists of walking when one is weary, and no boy is fitted for life who cannot walk. The child should indeed be led to the hard by the way of the easy; but the man has no real training or character who cannot, on due occasion, collect his powers to do a multitude of things that he considers hard and disagreeable. The spontaneous powers keep us alive in infancy, and death comes when they wholly fail us; but the highest end of education is the fullest development of the judgment, the moral sense, and the will. Hitch the spontaneous forces to your wagon by all means; but if you have no other horses, do not be surprised when you find that you drive a "balky" team.

Drawing nearer to President Elliot, it is not true that nothing is good for training which is not hard; but it is true that no training is complete which does not involve much severe and vigorous labor. It is not true that mental exercise is useful only when it is repulsive and distasteful, needing a dead-lift of the will; but it is true that a good many such "lifts" have to be made, and the child must be got ready for them by lifting. It is true that no subject is good for the training of a child in which the child is not capable of achieving something, and of enjoying the achievement; but it is not true that a subject is always good for him in the long run, in proportion to his present capacity and liking for it. Sometimes it is the case that a child, or older pupil, who has small capacity for a subject, and finds little pleasure in its pursuit, develops, through application and study, great capacity and pleasure. After they have passed the rudiments of learning, children should not be kept long at subjects for which, under skillful teaching, they have a positive aversion; nor, on the other hand, should the choice of these studies be left to their caprices and whims. Things should not be made hard that are by nature easy. There is no reason in blocking the way to grammatical analysis with a cart-load of nomenclature; or in weighing down the solution of a simple example in mental arithmetic with a ponderous formula. There is no excuse for retaining in text-books the artificial distinctions and antiquated methods often found in them. The arithmetics, for example, should not be museums for hanging up on exhibition "applications" that have disappeared from business, if indeed they were ever known there. But there is a difference between real life and training after all. In real life it is best to accomplish results with the smallest experimentive power, in the quickest way consistent with thoroughness; but in nursery and in the school this is not always the case. The child that can be carried quickly and easily across the room must learn to walk across it. Pupils must learn algebraical methods by first solving problems that they could more easily solve by arithmetical methods. Astronomers do not now, like Sir Isaac Newton, use the Greek geometry in making their computations;* but the mathematical student needs the discipline and the logical forms of the Greek geometry nevertheless. Moreover, we only destroy the child morally by keeping him forever shut up in a glass case; we should rather equip him with sound principles, good habits, healthful appetites and desires, pure affections, and right purposes, and then allow him to be subjected to trial and testing. Further, trial and testing are essential to the production of that very equipment. In a word, my whole contention is, that the child must be brought, progressively of course, to measure his full powers with the labors and difficulties of life.

My reason for dwelling so long on this point is my conviction that nowhere along the long line of educational discussion is there greater need of clear ideas. We forget sometimes that the end of teaching is not to place certain information in the mind of the pupil in the easiest way, but rather to see that is it retained and assimilated, and that the mind and character are strengthened by the process. Partly in this forgetfulness, and partly in our haste to hurry children along, lies the explanation of some of the characteristic features of our schools. Books are not taken away from children, but they are not given the chance that they need to study them; while teachers, with their "new educations," "natural methods," and "oral instruction," fill the children up with knowledge and at the same time destroy mental character. Perhaps I should remark that this is true only in a relative sense. It is quite generally asserted by high-school teachers, who have had a lengthened experience, for example, that their pupils are not the independent workers that they were fifteen or twenty years ago. An old lady familiarly called "grandma" was a patient in a hospital for the insane over which a friend of mine presided as superintendent. She resolutely refused to swallow food, and for two whole years fed herself only once in the natural way. She would place the feeding pipe in her throat, and hold the bowl of milk or broth in her hands, while the attendant threw the liquid into her stomach with a pump. One day the doctor said, "Grandma, don't you think it would be better if you would eat this food yourself?" "Oh, no," she answered, "this is so much easier!" With all his mistakes in educational matters, John Stuart Mill certainly understood the great educational transition of his times when he wrote:

> "I do not believe that boys can be induced to apply themselves with vigor, and, what is so much more difficult, perseverance, to dry and irksome studies by the sole force of persuasion and soft words. Much must be done, and much must be learned, by children, for which rigid discipline and known liability to punishment are indispensable as means. It is, no doubt, a very laudable effort in modern teaching to render as much as possible of what the young are required to learn, easy and interesting to them. But when this principle is pushed to the length of not requiring them to learn anything *but*

---

* Speaking of the ancient geometry used by Newton, Dr. Whewell has said: "The ponderous instrument of synthesis, so effective in his hands, has never since been grasped by anyone who could use it for such purposes; and we gaze at it with admiring curiosity, as on some gigantic implement of war which stands idle among memorials of ancient days, and makes us wonder what manner of man he was who could wield as a weapon what we can hardly lift as a burden."—*Draper's* "*Intellectual Development of Europe.*" N. Y., 1866; p. 529.

> what has been made easy and interesting, one of the chief objects of education is sacrificed. I rejoice in the decline of the old brutal and tyrannical system of teaching, which, however, did succeed in enforcing habits of application; but the new, as it seems to me, is training up a race of men who will be incapable of doing anything which is disagreeable to them."*

Mr. Mill even said: "A pupil from which nothing is ever demanded which he cannot do, never does all he can."

This is President Elliot's second paragraph:

> "This idea I know, if carried out thoroughly, runs directly counter to another very common idea—namely, that there is a considerable number of subjects which everybody ought to know. Now, the longer I live, the greater experience and wider observation I have, the more I settle to the conviction that there is no one thing that a liberally educated man *must* know. In arithmetic, for example, what stumbling blocks to children are least common multiple and greatest common divisor; but we have all discovered that common people have no use for either of these matters. And so on throughout much of school education. It is not at all *necessary* for everybody to know what air is made of, where the River Charles rises, how the pump draws water, or the names of the stars, or of any of the kings of Egypt. Not one of these things is in the slightest degree essential to a liberal education. Hence the notion that there is a certain number of subjects which everybody should know, ought never to be allowed to interefere with or counteract the general principle that the best training for every individual lies in the pursuit of those subjects for which he is best fit and which he enjoys."

Unfortunately, this language is not as clear as could be desired. In one sentence the President denies "that there is a considerable number of subjects which everybody ought to know," thereby apparently admitting by implication that there are some such subjects; and in the next sentence he affirms "that there is no one thing that a liberally educated man *must* know." The denial and the admission can be harmonized only by holding that the term "thing" applies to a single fact or object, and is not the same as a "subject" or branch of knowledge. But we are cut off from making this distinction by the last sentence, where what has before been affirmed of "thing" is affirmed of "subject." Apparently, then, the President of Harvard desires us to understand him in the most absolute sense; there is no thing or subject which a liberally educated man need know. This is a surrender of reading, writing, and arithmetic, unless, indeed, we are to suppose that these are instruments or methods for learning things and subjects, and not such themselves, which seems a forced construction.

One's view of the whole paragraph will depend somewhat upon the sense that he attaches to the expression "a liberally educated man," a topic that I set aside for the present. No one can fairly claim that such a man must know the elements of the air, the source of Charles river, the action of a pump, the names of the stars, or the names of the kings of Egypt. But the real question is this: What is a liberally educated man's relation to the great departments of knowledge to which these facts belong,—to chemistry, geography, physics, astronomy, and history? Admit for sake of argument, "that the best training for every individual lies in the pursuit of those subjects for which he is best fitted," provided we can only find that out; but since it is a fact that special talents do not ordinarily declare themselves at the age of ten or twelve, how are we going to make that discovery? The boy of those ages is quite apt to have a stock of whims and notions of his own; moreover, what he enjoys depends largely upon association and habit; and we cannot relegate his studies to the court of notion and enjoyment.

---

* "Autobiography," New York, pp. 52, 53. 1873.

But let us hear the President again:

> "There is another principle which we should bear in mind, though it runs counter to generally accepted ideas, viz: that uniformity in intellectual training is never to be regarded as an advantage, but as an evil from which we cannot completely escape. We have lately heard a great deal about "keeping step" as a valuable part of public school training; but I do not know a more unfortunate figure to use with regard to education. Even in military movements, if troops want to get anywhere, they never keep step. A large school is almost necessarily a kind of averaging machine. But we should always bear in mind that though this averaging may be in some measure necessary, it is a necessary evil. All would admit that it would be an ineffable loss to mankind if the few great men were averaged with the millions of common people,—if by the averaging process the world had lost such men as Faraday and Agassiz, Hamilton and Webster, Gladstone and Cavour. But do we equally well understand that when ten bright, promising children are averaged with ninety slow, inert, ordinary children, a very serious loss is inflicted, not only upon those ten, but upon the community in which the one hundred children are to grow up. There is a serious and probably an irreparable loss caused by the averaging of the ten with the ninety children. Therefore, I say that uniformity in education all along the line is an evil which we should always be endeavoring to counteract by picking out the brighter and better children, and helping them on by every means in our power."

No other paragraph in the address is so exasperating to public school teachers as this one, and no other is so deserving of their attention. But putting aside our resentment at being talked at in this manner, we should candidly inquire what there is in this matter of uniformity and averaging.

In a sense a large public school is "a kind of averaging machine." But the world is full of such machines, and we need not be over-afraid of them. A national literature, no matter how rich and varied, is an averaging machine. It tends to produce a certain mental homogeneity, a certain type of culture that is more or less distinct from all other cultures. The Anglo-American is not reared on the literature of Italy or Persia, and would not be Anglo-American if he were. The Christian Church, in the broadest historical sense, is an averaging machine; and so, in a much closer sense are the state churches of Europe and the Christian denominations of America. One does not need to be a theologian to trace the line of delimitation separating the Christian church from all other churches, as the Jewish, the Mahommedan, or the Buddhist. The Christian denominations rest upon certain doctrinal uniformities and certain spiritual *cultures*, which uniformities and *cultures* they tend powerfully to perpetuate. Non-conformity is the loose-fitting name of a multitude of British sects; but it nevertheless marks off some very definite beliefs or non-beliefs which those sects hold in common. Colleges and universities are averaging machines; their function being to provide society with liberally educated men, who, even when the name is held in a sense loose enough to please President Elliot, have something in common. Republican government and absolute monarchy are averaging machines, each tending to produce its own type of citizen or subject.

Nay, civil society itself, the very civilization of which we boast, is an averaging machine; it is plainly divided from barbarous or savage society, and tends to certain uniform results. Certainly in this broad sense, large public schools, and small public schools, and schools of all kinds are averaging machines. Moreover, they should be such machines. The name may offend us by its suggestion of mechanical rather than vital or organic processes, but we need not hesitate to admit the fact. Hence if President Elliot speaks absolutely when he says that uniformity in intellectual training is never an advantage, and that averaging is a necessary evil, I cannot agree with him; but probably he does not speak in that way. So far, then, there is no room for a quarrel.

But this is neither the kind of "averaging" nor the kind of "uniformity" that President Elliot means. He has in his mind a process that ignores the individuality of children, kills originality, rounding off the sharp knobs of genius and character, and thereby accomplishes two things—turning out a type of tamely uniform men and women, and losing to the world its Faradays and Agassizs, its Hamiltons and Websters, its Gladstones and Cavours. I do not share the fear that there is great danger of the potential great men of the future being spoiled in this way, but there is such a thing as over-averaging. Mr. Bagehot says civilization consists of two elements, custom and change, legality and progress. "Law, rigid, definite, concise law is the primary want of early mankind." This is the "cake of custom," or "the preservative habit," with which civil society everywhere begins. Then comes progress and variety; "getting out of a fixed law," "breaking the cake of custom," "breaking through the preservative habit, and reaching something better."* Both theory and history prove that the second of these steps is much the more difficult of the two. Asia is full of arrested civilizations. Witness China that once had a promising civilization, but that for thousands of years has stood still, wholly unable to break the tough cake of custom that antiquity baked. The averaging machine has there done its perfect work. We talk of the "average American," having in mind a certain vague type of man, and not venturing to point out as such any individual in the throng who jostle us on the street; but in Pekin, if I understand the matter rightly, you can safely point to almost any passer-by with, "That is the average Chinaman."

Once more, there may or there may not be a suggestion in the fact that the Chinese averaging machine is in the hands of the schoolmaster; in no other country in the world have the teacher, the school, and literary studies been so powerful in moulding the national character and life.

It is this excess of uniformity—this over-averaging—that President Elliot complains of, and that we all need to watch with fear and trembling. There is a certain danger of its appearance in schools of all kinds; other things being equal, more danger in large schools than in small ones, and in systems of schools than in single schools. Many teachers do over-emphasize—and the majority of teachers are more or less likely to over-emphasize—"keeping step." To compare the public schools with other schools might be thought invidious, and to speak in quantitative terms of any school is impossible; but I am free to say, for one, that President Elliot has in his remarks on "averaging" pointed out one place where public school men need to keep the danger signal all the time flying.

---

* Physics and Politics, N. Y. 1873, pp. 20, 53.

Men offer to our observation a great variety of talents and tastes. In his late address at Johns Hopkins University, Archdeacon Farrar said:

> "The minds of men differ radically. Some men, like my friend the late Dean Stanley, are interested in the nature and thought of man; others breathe most freely in regions of the abstract. Charles Darwin said that at school he had learned nothing with the exception of that which he had taught himself by private experiments in chemistry, and when the head master discovered him, instead of encouraging him, he reproached him before all the form with being a "*poco currente*," which he thought a dreadful name. St. Bernard is so dead to outer impressions that he travels all day along Lake Geneva and then asks where the lake is, while Linnæus is so sensitive to the beauties of nature that when he beholds a promontory standing boldly forth and teeming with beauty, he cannot help falling upon his knees and thanking God for such a world."

What educational problems do these examples suggest! But every man of much reading can readily parallel them, even if he cannot state them in as choice language. Sir Walter Scott took no interest in the regular school studies, and was voted a dunce by the masters; but he had a passion for the antiquities, history and minstrelsy of Scotland, and finally became the great chivalric poet and historical romancer of the century. A much commoner case is such as this: A boy who does nothing in school but make trouble, has a taste for drawing and mechanical contrivance; he spends the time that the teacher wants him to bestow on geography and grammar in making pictures and toy machinery, and at last blossoms out, to the surprise of everybody, an architect or inventor.

But the variety of character is greater than the variety of intellect. The sensibility and the will present to the educator more, and more difficult, problems than the understanding. Children's minds have been compared to combination locks; if you have the "combination" you can enter at once; if you have not no pounding on the door will give you entrance. Sometimes the combination is simple and easy, and then again complex and difficult.

Now our problem is to adapt the schools to this variety of mind and nature. Averaging of some sort begins at once. One hard thing to manage is the course of study; the work assigned in the grades must not be measured by the ability of the brightest nor again of the dullest scholars. The problem confronts us again in the examinations and promotions. Then the teacher question brings it up in a still more trying form. Some teachers can rise and fall through two or three octaves, some through one octave, some are confined to a single note. In government and moral control it is even worse, since the average teacher has less power to discipline than she has to instruct. One teacher reports a pupil stubborn, another says he is quite manageable. One teacher soothes the boy who is bristling like the fretful porcupine, another ruffles him and maks him more fretful. In some schools you will always find more or less irritation and friction; troublesome boys who pass into others disappear from sight like icebergs drifting towards the torrid zone. We have difficulty in accounting for these differences in teachers. Even the most skillful analysts of character fail us. They mention "good sense," "sympathy," and several other common qualities, and then pass off into vagueness—"native tact," "subtile influence," and "indefinable quality." Most unfortunately, where the teacher should be fullest of resources, the most vicious averaging is done. Again, women are more skillful than men in finding the mind and heart combinations of small children, and this is why they make the best primary teachers.

I am familiar with the manner in which the regulation schoolmaster puts aside such examples as those just presented. He says they are "exceptional," and declares, what is true enough, that, as a rule, the boys and girls who do well in school do well in other places; but the question arises whether the child that cannot go at the common pace but has a pace of his own—the boy who is separate and apart, and is therefore called "queer," or "odd," or "strange," receives the attention that is his due. Should such a boy as Walter Scott or Charles Darwin or Humphrey Davy appear in the schools of Detroit, Chicago, or Cleveland, would he find any room, or would he be driven out by the established regimen? I shall not answer my own question, but will say that sometimes it seems to me we have in the schools a case of "arrested development." The graded school movement has done great things for education; it has brought system and order out of chaos; it has created custom and legality, but the question of individual adaptation and progress has not been fully solved. The "cake of custom" has been baked, but not fully "broken." This is my excuse for offering some remarks on this point of a more definitely practical character.

1. President Elliot does not exaggerate the value to the world of its great men; nor is his solicitude for the ten brightest children in a hundred misplaced. He was right when he wrote in an *Atlantic Monthly* essay ten years ago:

> "We Americans are so used to weighing multitudes and being ruled by majorities that we are apt to underrate the potential influence of individuals. Yet we know that Agassiz's word about a fossil fish justly outweighed the opinion of the whole human race besides; that Von Moltke is worth great armies to Germany; that a few pages of poetry about slavery and freedom by Longfellow, Lowell, and Whittier, have had the profoundest effect upon the public fortunes of this country during the past thirty years; that the religions of the world have not been the combined work of multitudes, but have been accepted from individuals. We must not be led by our averages and our majorities to forget that one life may be more precious than other millions; that one heroic character, one splendid genius, may well be worth more to humanity than multitudes of common men."

But it does not seem possible to make very full provision for the highest abilities in schools of any kind. The fact is, the men who have them move in an orbit, and with an impetus of their own. In discussing the scale of merit among men who obtain mathematical honors at Cambridge University, Mr. Galton speaks of the enormous differences of power that the examinations reveal. One year the senior wrangler obtained 9422 marks, the man who stood at the bottom of the same honor list only 309. Galton states the ratio of abilities as 30 or 32 to one. That is, the senior wranglers are able to grapple with subjects thirty or thirty-two times as difficult as the men who come in lowest on the lists. And yet he insists that in the examinations, the best men do not have a fair chance, owing to the large amount of time that is taken up in the mechanical labor of writing.* Now how are these extraordinary men to be educated? I can see but one possible answer,—they must, for the most part, get what they want in extra school work. What they want is great teachers who can guide them in these studies.

---

* "Hereditary Genius," N. Y., 1870, p. 20.

This is what Dr. Brunnow did for Watson at Ann Arbor. It is not practicable to bring the brightest pupils in a public school grade together in classes by themselves; the different classes of pupils within the grade, must, for the time, work on together; but when we succeed in gearing the public library to the public school the best pupils can pour their surplus power into literature. It may be replied that the best pupils are apt to be the nervous and precocious ones, who should not be crowded, which is true in a measure; but there are other pupils of superior ability and strength who can do more than the allotted measure of work.

2. A good teacher can do a great deal of this differential work within the school. Here I fear teachers do not always understand their business. At the beginning of a term a class is graded, and the teacher perhaps thinks that she should keep it graded. Not at all; it is her duty to ungrade the school as quickly and thoroughly as possible. "Even classes" may be very easy to handle, but they indicate only average teaching. English fox-hunters think it a great merit in a pack of hounds to run in so close a body that a bed blanket will cover them, but teachers should not think their schools "packs." By "ungrading" the school I do not mean that the children are always to be promoted out of the class, though that is sometimes best; I rather mean that extra work may be furnished in school or out of school to those who are able and anxious to do it. This would, in reality, be putting two or three courses in the one course: *imperia in imperio.*

3. To provide elective studies in lower grade schools is impracticable. The studies of those grades are fundamental in character as well as in name, and the children, with the exceptions soon to be made, must be held to them. But you will often find boys who have no taste and no ability for grammar, for example, but are good readers, good arithmeticians, good geographers, and are full of general information into the bargain. To refuse promotion to such a boy, particularly if his stay in school will be short, is an injustice. The same is true of the girl who succeeds in everything but arithmetic. But I shall be told that there are indolent pupils, and pupils who have dislikes for particular studies, and that these will also ask for promotion when they fail. This difficulty is not an imaginary one; but I reply, that I would promote none on this score who have not also been successful in nearly all the studies. Moreover, the refusal to do justice to one class of pupils because another and a different class will make trouble, while it must sometimes be done, perhaps, is most emphatically a vicious averaging process. Again, there are pupils who never master the work of any grade beyond the fourth or fifth; they absorb "so much" of a subject and never absorb any more; and, when the point of saturation is reached, they should be moved along. Of course such pupils cannot be carried through the schools and graduated; fortunately for the management, however, they generally disappear before graduation day comes. Perhaps I shall be asked, "How much would you yield at these various points?" That question cannot be answered in quantitative terms. What I mean is, I would individualize the cases and deal with them as they arise.

But one side of uniformity and averaging President Elliot did not touch upon. It was left to Prof. Harris, of Andover, to discuss at that now famous dinner, the subject of "order." He is reported as having said: "Order is not heaven's first law; order is the law of a small mind—of an imitative, mechanical mind. Order, as a law, reminds one of a Dutch garden, of rooms in a hotel with furniture arranged exactly alike. There is a vast distance between order and disorder where variety may appear." We need not weigh these words one by one, or as a whole, but it is desirable to think the important subject of order out to the end.

The common saying that order is not an end but a means is perfectly true. The same may be said of education itself, though in a different sense. Order is proximate to education, education to life. A certain kind and amount of order is essential to intellectual education; there must be attention and application to the objects of study. Migratory tribes never become highly civilized; bodies of men must, as a whole, become fixed and permanent before they can really enter on the march of mental and moral progress. A similar condition attends the education of the individual pupil. Then order has an important moral bearing. Regularity, punctuality, industry, and obedience, all requiring much self-control, are prominent features of public schools as now organized and conducted; how important they are as moral virtues no reading and thinking man has an excuse for not understanding, since Dr. W. T. Harris gave them this rank and dignity, first in one of his St. Louis reports, and afterwards in a report made to the National Council of Education, in 1883. And this is one side of the case as fully as I need to present it; now for the *per contra.*

Nothing in school management is easier than to overdo "order." Particularly is this true in the cases of small children of American ancestry, with a tendency to nervousness. Every man of sense and observation will admit this the moment he reflects on their restless manner, their animal spirits, and their small power of physical self-control. Such children must have frequent physical exercises while the school hours are passing; also a good deal of liberty when engaged in work at their seats. They cannot be "trussed" like so many chickens. Such tests of school excellence as "you can hear a pin fall," or "a watch tick," are most unnatural, absurd, and tyrannical; human nature rebels against such repression. Reasonable order in the schoolroom must, for the most part, be secured indirectly; it must come as the result of keen interest in, and close application to, the work. What is sometimes called "good order" does not always imply either interest in studies or a good school, since it may be secured by extreme repression; but interest and application are pretty certain to lead to good order. In other words, order should be largely spontaneous; in the long run, that teacher will best succeed in securing it who says little about it. Even grown persons who are consciously trying "to keep still" find it difficult to do so. How hard many find it to sit for a photograph! The boy whose business is to "be quiet" is very certain to make a great deal of noise while about it. Moreover, a positive direction or order to "keep still," given to any assemblage, is likely to provoke nervous and muscular movements. Great audiences are as "still as death," not when the orator is descanting on order and stillness, but when he loses them and himself in his subject. Hence attempts to secure order should not be thrust too much into the faces of children. Wendell Phillips tells an anecdote of a judge who said to the crier of the court, "Mr. Crier, you are the noisiest man in court, with your everlasting shout of 'silence!'" So it is in some schools; the teacher with her sharp cries, "attention!" "position!" causes, directly and indirectly, more nervousness and confusion than all the school put together. I have heard children say, "I cannot keep still in *that* school." But while the order of the school should be mostly spontaneous, and therefore unconscious, I know full well that often the teacher must take a pupil, and even a school, "in hand" and bring about the desired result by direct means.

But there is another view of the subject, second to no other in importance. A good teacher must possess two great qualities—the power to govern or manage, and the power to instruct and develop the child. That the second of these is the greater power is as clear as that the first is often more highly valued. Unfortunately, there are teachers of good abilities, excellent character, fine education, "apt to teach," and of admirable influence on mind and heart, who are not gifted—some are even weak—as managers. In time they may establish their influence in the school, but they cannot walk into the room and command order with a nod or a wave of the hand. Still more unfortunately, there are other teachers who have large power to manage, but are very poor and weak in intellectual and moral qualities. These teachers, often coarse and ruling by mere animal dominancy, can "nod" and "wave" children into enforced subjection, but they succeed indifferently in the great ends for which the school exists. I am fully aware that a certain amount of control is essential to good instruction, and that a teacher who cannot govern, no matter how admirable a person she may be, is a failure; but it has often seemed to me unfortunate that, nine times in ten, the visitor or the superintendent, on visiting a school, especially if the teacher be a new one, is first struck by the order and afterwards by the instruction. Then five or ten minutes often suffices the experienced observer to tell whether the school is managed or not, while repeated visits, some of them protracted ones, are necessary to ascertain what is the character of the instruction along all the lines of school work. Particularly is this true in the upper grades, where the work is widely differentiated. These theoretical views, together with some observation, lead me to two conclusions which, however, at root are but one: that the superintendent, the school board, and even the whole community, are pretty certain to over-value the managing teacher as compared with the developing teacher; and that in our public schools generally too much attention is given to order as compared with instruction. And still a teacher must govern to a degree or she cannot develop.

This group of topics which has detained us so long, may be dismissed with these additional remarks: That the public school system of a large city, with its grades, courses of study, teachers, supervisors, etc., is necessarily complicated, and more or less machinelike; that it may easily be made a deadening, repressive, and oppressive machine; and that educational bigots and sciolists will be sure to prostitute it to these ends. No other schools call for more intelligent teachers and supervision. It was once said of a great national church that abounded in mechanical elements: "When once this vast organization, with its minuteness of ritual, ceased to be constantly vivified by the breath of prophecy often passing over it, like a divine whirlwind, to shake its entire fabric, its tendency was to petrify into immobility." Something like this will happen to the public schools almost the very hour that they cease to feel the vivifying breath of public discussion.

Except a few sentences on the history of the educational profession, President Elliot devotes the remainder of his address to the problem of moral education. So far as I have observed, his views on this subject have attracted more attention, and called out severer condemnation, than on any other subject that he handled at the Boston dinner. The paragraph is a lengthy one, but it will relieve the tedium of my own discourse:

> "Another point I wish to mention is that we shall never get what we need from our educational institutions if we try to put them on a purely secular basis. It seems to me that during the last twenty-five or thirty years there has been a relative decline in the intellectual and spiritual part of our National life. The *material* is getting too strong a hold of us. Of this decline one evidence may be seen in the very slow growth of our higher institutions of learning—a growth which by no means keeps pace with the increase of our population. The very best outcome of school life is a taste for serious and earnest reading, which will nourish in a boy, as he grows up, his intellectual life. He need not be reading mathematics and theology; he may read history, fiction, travels, biography, or even politics. But that taste for reading, whatever its kind may be, must be implanted at school; and this object should be persistently kept in view from the primary school up. It should be almost the supreme object of the teacher's efforts. And yet there is another vital work to be done at school—the cultivation of the love for beauty, goodness, and truth, and of the sense of duty and honor. Some say this can be done without the aid of religion. It never has been. How to combine a true religious and moral training with our present secular education is the great question of to-day. This problem had not arisen here sixty or seventy years ago; for then our people were homogeneous. To-day they are heterogeneous. Germany, Austria, France, Belgium, and other countries of heterogeneous population have solved this problem by combining various religious instructions with the public secular education; the religious teachers belonging to different denominations are admitted to the public schools at fixed times, and government appoints and pays the religious as it does the secular teachers. That is the only way out of the difficulty, and it is in accordance with the general policy of the American Governments, National and State, towards American churches. To-day I see growing up about us parochial schools—that is Roman Catholic schools—which take large numbers of children out of the public schools. That is a great misfortune; and the remedy surely is to admit Catholic instructors to teach Catholic children in the public schools. The priest, the minister and the rabbi should all be employed to teach the children of their respective communions in the public school at the same hour, and each should be paid for his service from the public treasury. All those who are strongly interested in the successful maintenance of our public school system will, I believe, eventually urge the adoption of the method I have described for providing moral and religious education at the public charge."

President Elliot here asserts, in effect, that the American people have less interest, relatively, in literature, science, philosophy, art, and religion,—that is in "the cultivation of the love for beauty, goodness, and truth, and of the sense of duty and honor" than they had a generation ago; and that they are more absorbed in creature comforts and material well-being. Whether true or not, a multitude of facts can be brought forward to support this discouraging view. The worship of money appears to grow more and more; the voice that cries for "practical education" in the mean and narrow sense becomes louder and louder every year; and we seem in danger of forgetting that there is a life of art and sentiment, of beauty and reverence, within the life of money-earning and money-spending, which must be fed. The life is more than meat and the body than raiment. What Matthew Arnold calls "the remnant" must therefore contend earnestly for ectness and light, remembering the counsel of Goethe: "Men are so inclined to content themselves with what is common—the spirit and the senses so easily grow dead to the impressions of the beautiful and perfect—that every one should study to nourish in his mind the faculty of feeling the best things by every method in his power. For no man can bear to be entirely deprived of such enjoyments; it is only because they are not used to taste of what is excellent, that so many people take delight in silly and insipid things, provided they are new. For this reason one ought every day at least to hear a pleasant song, read a good poem, see a fine picture, and, if it be possible, speak a few reasonable words."

But the President makes a novel prescription for our ills when he recommends that the priest, the minister, and the rabbi shall be sent into the schools to teach the children morals and religion. In New England at the beginning of the century, when society was homogeneous, and the priest and the rabbi were almost unknown, the minister could do, and did do, with what results does not for the moment concern us, this very thing. It is also done in some continental countries to-day, no matter whether wisely or unwisely. But in the United States to-day the scheme is so chimerical that to propose it argues a failure to grasp the conditions under which public schools exist. First, such a programme could not be adopted without the united support of religious men and organizations. Secondly, it could be carried only against the united and bitter opposition of the materialists and secularists who are so numerous and strong in the cities. Thirdly, the practical attempt to work the programme would make no end of strife and confusion both in the schools and in society. Moreover, back of all these difficulties lies the question whether this scheme contemplates the right moral ideal. However that may be, we shall not, I imagine, again see the catechism in the school, and must try and solve the moral problem in some other way.

It will be seen that President Elliot's prescription for the public schools is the bold proposition to carry into them his Harvard policy of eclecticism and comprehension. Having discussed his several points, one by one, I wish now to offer a few remarks on the underlying principle.

It is manifest to the dullest that liberal education in this country is undergoing a transition. Scholars of former times drew a sharp line between liberal education and professional or special education; the tendency now seems to be to obscure this line. Again, scholars formerly held that liberal education came from the pursuit of certain liberal studies or arts. When a boy went to college everybody knew as well what "the liberal arts" were as that the boy went to pursue them. He studied the classical languages and mathematics mainly, but gave some attention also to philosophy, science, and rhetoric. In those days the Republic of Letters could be easily bounded, what constituted its citizenship readily told. What is more, the Republic originally embraced all the general studies, and so was liberal in a very literal sense. But knowledge grew, and in time spread far beyond the old boundaries. Now came on a struggle between those who loved the old Republic and those who loved the new learning; the question at issue being the extension of the citizenship. In this struggle those who stood for tradition have had the worst of it; change has followed change until at Ann Arbor several courses of study, which begin to separate at the sophomore year, lead up to the first degree in arts, and at Harvard, all studies are elective after the first year, and the president contends for election from the very first. Some col leges have made more changes, some fewer, but all have made many; and the time has at length arrived when to say a boy is at college conveys no definite idea of what he is doing. This change has been watched by those who stand for "the old studies" with much the same feeling that conservative Romans watched the extension of the Roman citizenship until it embraced the whole Roman world. Hence arise the questions: Shall we go further in the same direction? Will change follow change until the designation "liberally educated" shall mean no more than that a man or woman has devoted several years to the successful cultivation of studies? * Are the liberally educated men of the future to have only the name in common? In a word, is the Republic of Letters to give place to the Empire of Knowledge? These questions are thrown out for suggestion, and not for answer. My own faith is conservative-liberal. While I never had any patience with that bigotry which denies the name of scholar to a man because he has not followed certain educational rubrics, and while I think nearly all of the recent changes are in the line of progress, I am not convinced that elective courses in college should spring from matriculation day and diverge more and more to graduation. Denying as I do that the average freshman is the fittest person to choose his own studies, I deny still more stoutly that the elective principle should be, or can be, carried through the public schools. Undoubtedly considerable scope may be given to election in the high school; but there is no place for it in primary and grammar schools, beyond the small one that I indicated in discussing uniformity and averages. All the pupils should learn to read, spell, write, and should learn something of geography, arithmetic, and of their own language; and this is substantially all that we accomplish in the primary and grammar grades. Education is simple and homogeneous in its earlier stages; and no matter what pursuits or professions boys and girls follow in later life, they all need the rudiments of learning as a preparation.

One thing more and I am done. More than anything else in the world, education is a question of men and women. No matter what important school question we raise, it soon passes into the concrete. Courses of study and methods of instruction lead quickly up to the question, "Who are to do the teaching and supervising?" All contemplated reforms resolve themselves into the teacher-question. Like other instruments of vast power, the public school system may be greatly abused; and whether it is or not will depend, in the first place, mainly on the intelligence, education, and devotion of teachers and supervisors. To aid in solving this problem, such associations as this exist, and such meetings as the present are held. I can leave with you no larger hope than this, that in your efforts to solve this problem you may meet your fullest expectations.

---

* *The Nation*, No. 1079, discussing President Elliot's last Report, published since this address was written, says: "He concludes, in answer to a question often asked, by stating that the degree of Bachelor of Arts means at Harvard 'that all Bachelors of Arts have spent from seven to ten years, somewhere between the ages of twelve and twenty-three, in liberal studies.' It should be added that President Elliot does not regard the present system as a finality, but as infinitely perfectible, holding fast to the fundamental law of freedom."

SCHOOL SANITATION.

BY DR. J. H. KELLOGG, BATTLE CREEK.

Mr. Chairman, Ladies and Gentlemen: The subject upon which your committee has asked me to address you, is one which I regard of immense importance to the rising generation, and which, in its broader aspects, may be fairly considered as paramount to all others relating to the school life of the child.

Sanitation in relation to the school, to students, in its fullest meaning, comprehends all that relates to the physical, mental and moral welfare of the individual during that period of life especially devoted to educational training. I cannot attempt, however, in this brief paper, to cover the whole of this broad and interesting field of thought, but shall confine my remarks to those influences and conditions which have a direct relation to the physical well being of students, fully believing that the terse motto which the ancients inscribed upon their temples of learning, "A sound mind in a sound body" is as thoroughly true in these degenerate days of high mental culture and low physical endurance, of morbid, nervous activity and slow digestion, as in those remote days when the apostles of the doctrine of mental dependence upon physical conditions were setting examples for all time in physical prowess and personal bravery, solving some of the most difficult problems in science and philosophy, and chiseling those unapproachable masterpieces of art which have been the marvel of all succeeding ages.

This question has also an important moral bearing.

1. In the obligation to preserve in their integrity these masterpieces of the Divine Artist, our bodies, and
2. In the intimate interdependence of our physical, mental and moral natures.

The teacher who considers that his work is done when he has maintained good order in his school, listened to the recitations of his pupils, and given them any necessary assistance in their tasks, has a very narrow conception of his duties and obligations as a trainer of youth. The school-going period is the most important of an individual's life. It is that in which his body is being developed, and his character formed. The importance of surrounding the child with proper mental and moral influences is unquestioned; but the necessity of giving equal attention to physical conditions does not receive the attention which its importance deserves. One who is familiar with the results of modern biological researches respecting the relation of mind and brain, and the intimate association of vital functions in the human body, will not question the statement that such conditions as affect the physical health of a child are equally as important in relation to his mental and moral welfare as to his physical vigor.

The duty of every teacher as regards school sanitation requires,

1. That he should use his best efforts to secure for his pupils the best possible hygienic conditions while in the school-room.
2. That he should give them such instruction in individual hygiene as, if followed, will prevent a large share of those bodily ailments which often seriously interfere with their intellectual advancement.

The performance of the first part of this double duty will require the teacher to see that his school-room is well ventilated. An adequate supply of pure air is the first essential of vigorous, healthy life. A man may live weeks without food, and several days without water, but dies in a few moments when deprived of air. The natural instincts of a child crave an abundance of pure, untainted air. It is the stifling, overheated atmosphere of the school-room, filled with the poisonous products of respiration and skin exhalations which leads many children to dread the confinement of the class-room; and often so keen is this repugnance, it quite overcomes every other consideration. Perhaps we are not doing more than justice to the student when we assign the physical longing for a breath of God's life-giving oxygen as a potent cause of truancy and absenteeism in young boys whose occasional holidays only serve to keep alive those natural instincts which a continuous life in the vitiated air of our stove-heated houses and crowded, unventilated school-rooms, would effectually quench. Jean Paul, the honest champion of children's rights, used to sit by a knothole in the side of the crowded school-house, where his education was begun, for the purpose of enjoying the luxury of an occasional whiff of unadulterated air; and he sometimes contemplated an escapade with some wandering party of gypsies or wood-cutters, from which he was only deterred by the fear that his sally for pure air would be misinterpreted as ingratitude toward his parents. He tells us how he longed for the opportunity of "fetching in cord-wood from the woods and splitting it into the nicest, handiest pieces, carrying messages over the snow-covered mountains, and be back in half the time any one else could make the trip, do anything that would save me—not from my books, but from that glowing Moloch of a big stove, and that stifling, soul-stifling smell of our dungeon!"

The foreign professor who called the school-rooms in one of our large cities "child-pens," was not guilty of gross exaggeration. I have seen many school-rooms in which the air space allowed each pupil was less than two hundred cubic feet, only one-third the amount allowed the English soldier in barracks, and even less than in the crowded tenement houses of London. Without the most efficient ventilation the air of such a room soon becomes exceedingly foul, and has a stupefying effect, which renders impossible clearness of perception and retentiveness of memory, and inflicts as much actual damage upon the system as indulgence in mild narcotics capable of producing a similar effect. What teacher has not observed the increased mental activity and brightness of students who have just come in from a few minutes' exercise in the open air after an hour and a half of confinement in the close atmosphere of the average school-room?

Several questions arise respecting the air supply of the school-room, which we should consider.

1. How much air is needed?
2. How may the needed air be obtained?
3. How may a building constructed without reference to ventilation be efficiently ventilated?

The first question we will answer by a little computation.

Let us suppose that we have a school-room 36 feet long, 30 feet wide, and 10 feet high. The cubic contents of such a room will be 10,800 feet. In a crowded school building we should probably find such a room seated for about sixty students. The question we wish to determine is this: How long can the air of such a school-room, occupied by sixty students, be used before it will need to be renewed. Before we can answer this question we must ask and answer another. How much air does each student require in a given time? There are many very erroneous notions held respecting the quantity of air required in rooms occupied by human beings to maintain healthful purity. Physiologists tell us that we breathe out and in our lungs with each respiration about twenty cubic inches of air. This quantity of air contains four cubic inches of oxygen, of which we use one at each breath, replacing the one cubic inch of oxygen used by nearly an equal quantity of carbonic acid gas. To suppose that we need only sufficient air to replace the one cubic inch of oxygen used, or even that a quantity of air equal to what we take into the lungs at each breath will answer the demands of the system as regards air purity, is an error. We need to employ means of ventilation, not simply for the purpose of replacing the air which we have used, but for the purpose of removing the air which we spoil. The cubic inch of carbonic acid gas which we breathe into the air with each breath has associated with it a certain amount of organic matter so poisonous and deleterious in character that the quantity contained in a single expired breath, is, according to some of our most eminent sanitary authorities, sufficient to contaminate to a degree which renders it unfit for breathing, three cubic feet of air. In other words, we spoil at each breath three cubic feet of air, which must be replaced by an equal quantity of pure air, to prevent air poisoning. If we wish to ascertain how much air is spoiled in any given time, we ascertain the number of respirations, and multiply it by three. The average number of respirations by pupils may be placed at twenty per minute. Multiplying twenty by three we have sixty, which represents the number of feet of pure air required by each pupil per minute. For an hour sixty times this quantity, or 3,600 cubic feet of air, will be required. To obtain the amount required for any number of students in a given time, we simply multiply these figures by the given number of persons. In our school-room we have 10,800 cubic feet. If we wish to ascertain how long this air would last sixty pupils we have to divide it by 3,600, which represents the amount used by sixty pupils in one minute; 10,800÷3,600=3, which represents the number of minutes during which the air of a school-room of the dimensions named, occupied by sixty students, could be used before it had become unfit for longer use.

These figures are undoubtedly somewhat startling, but I assure you they are the result of careful experiments and observations made by distinguished workers in sanitary science. It would be fair to mention, however, that there is some division of opinion among authorities on this question. There are those who contend that so great a degree of purity as that contemplated by the figures named, is not absolutely necessary for health, especially for school rooms, lecture rooms, and other audience and assembly rooms, which are not occupied more than an hour or two at a time. If we hold with the authorities last named, we may divide the amount of air required by two. With this estimate the air of such a school room as we have described could be breathed six minutes instead of three minutes before becoming unfit for use. At the end of six minutes, however, it must certainly be changed, and it is necessary that means shall be provided which will secure a constant renewal of air with sufficient purity to secure an entire change every six minutes. We may lay it down as a rule, that the average school room requires sufficient provision for ventilation to secure an entire change of the contents of the room ten times every hour.

The figures may be startling to those who have never given this subject careful study, but I assure you they are based upon the statements of the most eminent scientific authorities, and are in no way overdrawn. Endeavor to imagine the condition of the atmosphere of such a school-room as we have been considering. After the first few minutes the air is unfit to breathe, and continually becomes more so, until the transient opening of a door or window affords some relief. You say, if this is a correct representation, why do not more persons die from this one cause? There are thousands of deaths occurring annually from this one cause. A great share of the colds, catarrhs, and consumptions, originate in the breathing of air which has been rendered unfit to breathe by repeated respiration. According to the Vital Statistics Report, nearly 4,000 persons die in this State every year, of whom one-third are under twenty-five years of age. How much of this slaughter is attributable to badly ventilated school-rooms? The great anatomist, Langenbeck, who declared that he had "cut up more human beings than the old man of the mountain," claimed, as one of the results of his researches, that he had established the fact that the great cause of consumption is the breathing of impure air, and the worst kind of impure air is that which has been passed through the lungs of human beings or lower animals.

This immense sacrifice to ignorance and the disregard of the teachings of natural instincts, which are usually safe guides when unperverted, would be greater still were it not for that wonderful faculty of Nature by the aid of which she mitigates evils which she cannot escape, through a sort of vaccination with impurities, which to some degree protects the system from that immediate and fatal damage which it would otherwise receive. Just as a tolerance for opium, arsenic, alcohol, and other poisons, is established by use, so the system becomes accustomed to bad air when long subjected to it, and to such a degree that it may even be preferred to pure air. The man who spends his life in the close, foul atmosphere of an unventilated counting room, or the lady who has grown pale and haggard under the influence of the vitiated atmosphere of a stove-heated house, will look aghast if a fellow-passenger in a stage-coach, or railway train, whose instincts have not been anesthetized by a similar experience, seeks to dilute the gaseous filth of the apartment by demanding the opening of a window. Such persons, like certain species of animals which live in holes and festering swamps, have become acclimated, so that they are not killed outright, but are able rolong a sort of existence for many years, under conditions which would kill a North American Indian or a South American monkey in six months. This acclimatizing process is a long and painful one. The undepraved instincts of the child are sensitive to bad air as to other abnormal things; and the long struggle by which it becomes inured to impure air, is one which often results in the destruction of the young and tender life, and always interferes with the healthy and normal development of mind and body.

Let us now consider the question: How may the needed quantity of air be obtained? The idea is prevalent that the science of ventilation is a very uncertain one, and that any system which may be adopted cannot be depended upon for positive results. This is a dangerous error. The principles of ventilation are simple, exact, and uniform in their action, under uniform circumstances. The leading principles which must be recognized in the ventilation of buildings may be stated as follows:

1. For efficient ventilation of each room in a building, two openings are necessary, one for entrance of fresh air, and one for egress of foul air.

2. When the fresh air enters a room *warm*, as when furnaces or jacketed stoves are used for heating, the foul air opening should be at the bottom, as the oldest air in the room, and consequently the most impure, will be that which has been in the room the longest, and has been gradually cooled by contact with outside walls and window surfaces. When a room is heated by stoves, the foul air opening should be near the ceiling.

3. The size of openings depends upon the number of persons to be supplied with air. It may be laid down as a general rule that an opening of twenty square inches of space in both inlet and outlet is required for each individual in a room. The openings should be of sufficient size to allow a passage of at least two thousand cubic feet of air per hour without creating perceptible drafts. Air cannot travel through a room more rapidly than five feet a second without a current being perceptible. A sick room needs two or three times the ordinary amount of ventilation.

4. The foul air openings of rooms should connect with heated ventilating shafts. Cold-air shafts are uncertain ventilators. They are not to be relied upon. The amount of draft in the shaft depends upon the height of the shaft and the amount of heat in it. Various methods of heating the ventilating shaft may be adopted. In a building heated by steam, steam pipes may be employed. In ordinary dwellings, the waste heat of smoke-pipes or chimneys may be utilized for the purpose. An oil-stove or a gas jet may be used for heating small shafts in dwellings; or a small stove may be used to accomplish the same purpose in larger shafts.

5. Rooms on different stories should not open into the same ventilating shafts unless the heat is placed above the highest opening, as the upper rooms are likely, under various circumstances, to receive the foul air from the rooms below.

(The foregoing principles were illustrated with models constructed for the purpose.)

But I think I hear some one whisper, My school building was not constructed with reference to proper and scientific ventilation. Let us see what can be done under such circumstances. We cannot undertake to answer this question in a manner applicable to all circumstances, but we will venture the statement that it is possible to secure efficient ventilation for any ordinary school building, even though it has been constructed without reference to ventilation, and at a very moderate cost. We must first provide for the fresh air supply. This must be managed in such a way that the air shall be warmed as it enters the room. By the adoption of this plan, we not only avoid the danger and inconvenience of drafts and cold feet, but the source of the heated current of incoming air serves to aid the ventilation. In houses heated by stoves, the stove may be jacketed. The jacket may enclose the whole or only a portion of the stove, as illustrated in this model which I show you.

The space between the jacket and the stove must be connected with the outside air by a supply pipe. A damper of some sort should be placed in the pipe so that the supply of air may be regulated to suit various conditions of wind and temperature. If possible, the external opening of the supply pipe should be at the southwest side of the house, as this is the direction of the prevailing wind in this latitude. It may be calculated that the air will travel through the supply pipe at the rate of about twenty or thirty feet a second, and this should be large enough to supply the amount of air required by the students occupying the room, calculating that each student requires not less than eight hundred or two thousand cubic feet of air per hour. The amount of air required will be about one-half foot per second for each pupil, or thirty feet for sixty pupils. If the incoming air travels at the rate of twenty feet a second, it is apparent that the fresh air opening must have an area of one and one-half feet. If the air travels less than twenty feet per second, it must be proportionately larger.

It is of little importance where the warm air is admitted, but it is essential that the foul air should be taken out at the bottom of the room, as before stated, and at the outside,—preferably in that part of the room which is usually the coldest. A shaft may be constructed in one or more corners of the room and carried directly out through the roof, or into the garret, from which the air may be removed by an Emerson's ventilator of proper size placed at the ridge. I show you here a model intended to represent a small house, which is heated by a jacketed stove, and which has a ventilating shaft in each corner of the room. All of the shafts open into the garret, from which the air passes out through a capacious ventilator placed at the highest part in the roof. This has the effect to warm the air and increase the draft. By placing a small kerosene stove at the bottom of each of the ventilating shafts the draft may be still further increased. (Various experiments were made with the model, the circulation of the air being shown by means of smoke introduced through the supply pipe, which quickly found its way out through the ventilating ducts.)

For the sum of $50 to $100 any country school-house of ordinary size may be supplied with efficient and satisfactory means of ventilation.

Next to pure air, pure water, unadulterated with the products of animal or vegetable decomposition, is most essential to health. Typhoid fever, cholera, and some other infectious diseases, are well known to be propagated through the medium of the water-supply. An epidemic of diphtheria which prevailed in the southern part of this State a few years ago was traced to the school-house well, which had contaminated by sewerage from a broken drain-pipe. One whose eyes have been opened by sanitary studies may see Death written on the curbstones of a large proportion of the school-house wells throughout the country. Not infrequently, the well is an open one, and it is sometimes made the depository of old boots and shoes, and odds and ends of ious sorts, besides sundry toads, mice, and other small animals to which the dilapidated condition of the curbing afford, easy entrance. A few years ago the water of the well of one of our well-known public schools acquired so foul a taste and odor that the principal decided that a mineral spring must have broken into it. Considerable interest was taken in the water by wide-awake capitalists, as well as by those whose senses had not yet acquired a genuine fondness for sewage and sulphuretted hydrogen, and a quantity was sent to a chemist for the purpose of determining its curative properties. The analysis showed a suspiciously large amount of chlorides, nitrates, and albuminoids, and the chemist suggested that the well be cleaned, which was forthwith done, with the result of finding a full assortment of old coats and sundry sorts of cast-off garments, superannuated boots and shoes, antique hats, and several varieties of canines, felines, and other quadrupeds in an advanced stage of decomposition. The prospects of the miner l spring enterprise were blasted, although the high flavor of the water had promised a great boom; and subsequent investigation developed the fact that certain young Americans who had been found guilty of offensive partisanship in a recent school yard fracas and punished therefor, had invented this savage way of getting even with the principal, whose family depended upon the well in question for their water supply.

But there are even more dangerous contaminations of drinking water than either old boots or dead cats. Human excreta, a far more deadly poison, is one of the most frequent sources of sickness and death, through the medium of drinking water. The use of water contaminated with sewage is well recognized among sanitarians as almost the sole cause of typhoid fever, a scourge which carries off annually not less than a thousand of our fellow citizens in the State of Michigan alone, nearly half of whom are within the school-going age, and a certain proportion of whom undoubtedly received the deadly infection from a contaminated school-house well.

What is a teacher's duty respecting the water supply?

1. Let him carefully examine the well and its surroundings. If there are vaults in close proximity, he should demand of the school trustees or directors that they be well cleaned out, thoroughly disinfected with a half barrel of sulphate of iron solution, two pounds to the gallon, and then filled up. The dry-earth system should be adopted, with a person appointed to attend to the regular supply of dry earth and emptying of receptacles. I have succeeded in getting this plan carried out in a few instances with most satisfactory results.

The next thing for the teacher to do is to examine the well. See that the curbing is sound. Ascertain positively that it has been cleaned within a brief period, not longer than a year.

Finally, examine the water. Water which possesses the following properties should be rejected as unsafe to use.

a. A very dark color, also *turbidity*, except in brook water, which is often turbid from the presence of particles of soil, which settle when the water is allowed to stand a few hours, leaving it clear and pure.

b. A bad odor, observed either when the water is fresh or after heating. Observe the odor by shaking a portion in a wide mouthed bottle and then bringing the mouth of the bottle to the nose.

c. A distinctly bad taste. Water will have no unpleasant taste, even if quite hard, from the presence of lime or magnesia. An unpleasant taste is usually due to organic impurities; but if the water contains other substances sufficient to produce a bad flavor, it is unfit to use.

TESTS FOR BAD WATER.

The following are reliable tests for the presence of organic matter in water:

1. *The permanganate of potash test.* Get at a drug store a solution composed as follows: permanganate of potash, three grains; caustic potash, twelve grains; distilled water, one ounce. Keep in a perfectly clean bottle with a glass stopper. Add with a medicine dropper two drops of the purple solution to a half glass of water. If the purple color wholly disappears in half an hour, the water is very suspicious and should be examined further.
2. *The fermentation test.* Nearly fill a clean two-ounce vial with the water to be tested. Add a small lump of pure white sugar. Cork, and put in a warm place. If the solution becomes turbid in a few days, the water is unwholesome.

An eminent English sanitarian once remarked: "When a man dies of typhoid fever, somebody ought to be hanged." We would not suggest the passage of a law providing that a school teacher should be hanged for every scholar who contracted typhoid fever from the school-house well, for in many instances undoubtedly the larger responsibility for sickness lies with other school authorities than the teachers, but certainly the teacher, whose pupils have contracted disease from the cesspool in the back yard from which the drinking water is drawn, is culpable unless he has made such an examination of the water as has been suggested, and, finding it impure, has closed the well and labeled it poison, and publicly warned his students that there is organic filth and death in the "old oaken bucket."

Another matter to which I deem it important to call attention in connection with my subject is that of physical exercise. Our teachers and school authorities ought to be aroused to an appreciation of the value of muscular training and the crying necessity for increased attention to the subject. Among the ancient Greeks and Romans, strength and symmetry of body were held in highest esteem. Not infrequently men were chosen to fill the highest positions of authority and influence, when the chief qualification which they possessed was unusual physical proportions and bodily strength. A Roman emperor, while on one of his expeditions, discovered a gigantic barbarian, whom he made one of his generals, and who afterwards became himself ruler of the empire. It was natural that the ancients should esteem physical strength so highly, as in warfare the failure or success of an army depended chiefly upon the ability and endurance of its soldiers in personal combat. The invention of the firearms and artillery of modern times has entirely changed the mode of warfare, so that at the present time the number and size of a commander's guns and the length of his purse are matters of greater consequence than the size of his soldiers.

So, also, the application of machinery to agriculture and to almost all of the arts, has greatly diminished the necessity for physical exercise in nearly every branch of human industry, and to such a degree that there is comparatively little demand for mere brute force, and physical development has come to be considered a matter or less consequence than formerly. The decline of physical culture has undoubtedly had much to do with the loss of that symmetry of form which obtained its perfection among the ancient Greeks, as shown in the Apollo, the Venus of Milo, and other specimens of ancient Greek art. This degenerative process is rapidly developing a race of deformed and decrepit human beings, who are so different from their ancestors of two or three thousand years ago, that they might almost pass for a different species. Each generation seems a little weaker, physically, than the one that preceded it, and the puny, pale-faced boys of to-day, with lank, feeble bodies, active but unbalanced brains, irritable nerves, and precocious propensities, are a poor outlook for the generation to come.

Notwithstanding the great and essential difference between the conditions of modern life as compared with the life of the Greek or Roman citizen of 2,000 years ago, it is still true that the man of physical strength and soundness is the one who, other conditions being equal, wins the prizes in almost every department of human life. Notwithstanding the many apparent exceptions, such well-known examples as those of the English premier, Gladstone, M. Thiers, Victor Hugo, William Cullen Bryant, and others equally notable whom we might name, are sufficient to establish the rule.

Physical development is only to be obtained as the result of exercise. Throughout the whole animal world exercise is found to be essential to growth and development. It is a universal rule in nature that an organ which is not used gradually wastes away until it becomes useless, and sometimes disappears altogether; while an organ that is used, develops in proportion to the amount of work required of it. Even the storm-beaten oak gains firmness and strength and increased vigor by the shakings it receives from the tempests and tornadoes which howl through its branches. Each time its massive trunk is swayed, its rootlets strike deeper down into the earth, thus not only securing a firmer hold, but providing an increased number of mouthlets through which nutrition may be received from the soil.

The blacksmith, with his right arm swings a heavy hammer, while with his left he holds with a pair of tongs, the heated iron, which he beats upon the anvil. In the course of a day, many thousands of vigorous blows are struck. This enormous amount of work performed by the right arm causes its muscles to grow much larger than those of the left, which are little if at all larger than those of men engaged in ordinary occupation.

Notice, on the other hand, the effect of inaction upon the arm of the Hindoo devotee, which he supports in a horizontal position, and consecrates to his deity, keeping it absolutely motionless for years. In consequence of this inaction, it gradually shrivels up until it becomes a mere stick, simply a bone covered with skin, the muscles having entirely wasted away.

We depend upon continued daily exercise for the ease with which we move about. If the hand is hung up in a sling for a few days, the whole arm speedily becomes almost useless. On removal of the sling, even after so short a time as one week, the elbow will be found to be stiff and the muscles rigid, and any attempt to move the arm painful. We frequently find the muscles of the body in the same condition as that of such an arm when we undertake to make some unusual movement, such as bending backward or sidewise. We discover that the muscles newly called into action are surprisingly weak, and that their use, even for a short time, may be followed by soreness and discomfort for many days. When little or no exercise is taken, the whole body speedily falls into the same condition of feebleness and uselessness.

Connected with every large school should be a room devoted especially to exercises, in which students should be required to go through with a certain routine of muscular work, not in a desultory and haphazard manner, but under the careful watchcare of a trained instructor. As much attention should be given to the adaptation of the proper amount and kind of exercise to each individual as a careful instructor devotes to the grading and classification of his scholars. Harm rather than benefit is the result in a great number of cases when students are turned loose without an instructor into a large gymnasium, with its swinging trapeze, horizontal bars, heavy weights, and other appliances which are well enough adapted to the requirements of well trained athletes, but are capable of producing great injury when undertaken by a novice. In a small school, a half-hour may be set apart each day during which the school-room shall be converted into a gymnasium. It is possible, even with the aid of no other appliances than the student's own limbs and the ordinary school desk, to arrange a program of exercise which shall, to a large degree at least, supply the advantages of a well-equipped gymnasium. If, instead of devoting a half hour to the practice of light gymnastics and such exercises as can be properly taken in a school-room, the teacher chooses to break up the interval between recess and intermission by suspending work for three or four minutes after each recitation hour, the good results of the mental and nervous relaxation and increased mental activity arising from even a brief period of muscular exercises will be still more apparent. There is no more practical way in which a due proportion of the school hours can be expended than in such ways as will develop that soundness of body, that suppleness of limb, that hardness of muscle, that grace and dignity of carriage, that soundness of digestion, and that vigor of intellect which can only be obtained by regular, systematic, vigorous muscular training.

The question may arise, will not ordinary labor answer the purpose as well as special exercises? In reply to this question, we have to say, many kinds of labor afford a sufficient amount of bodily exercise to secure a good appetite, a vigorous digestion, and many other good results of exercise; but there are very few trades which do not, to a greater or less degree, destroy the symmetry, if they do not more seriously deform, the body. For example, the farmer, from the enormous amount of back-work he has to do in stooping forward and lifting with the fork and shovel, pulling the rake, swinging the scythe, etc., becomes round-shouldered. The back muscles become enormously developed, while the muscles of the front of the chest are neglected. Thus it is that we find so large a proportion of persons who are past middle age, presenting round shoulders, flat chests, and a forward curvature of the spine. The blacksmith develops one arm and one side of the chest enormously, but gives so little work to the other that he really becomes, in time, deformed. The oarsman develops the muscles of the back and fore-arm, but gives to the upper-arm and muscles of the front of the chest an insufficient amount of work; consequently, the shoulders become rounded. The fingers, also, in continually grasping the oars, become more or less permanently crooked and their bones stiffened. The average farmer also has a somewhat awkward gait, and lacks nimbleness and dexterity in his movements generally.

It thus appears that an equable exercise of the muscular system, obtainable only by systematic gymnastics, is the only satisfactory means for securing efficient and symmetrical physical development. One of the greatest obstacles in the way of introducing this reform into our school system is the want of technical knowledge on the part of teachers. This is not really necessary for the employment of those simple exercises generally known as calisthenics, or gymnastics, as almost any intelligent teacher can make up a very satisfactory programme, which may be varied from time to time, by the study of any one of a number of excellent works which have been published upon this subject. For those who desire a more thorough and technical training, Dr. Sargent, the director of the gymnasium of Harvard university, has established a summer training school, in which the necessary information can be obtained, and we should not hesitate to guarantee to any one who will undertake the delightful task of mastering this important branch of human culture, such an improvement in personal health, in physical vigor, and intellectual acuteness, as will be considered an ample reward for the time and means expended. The crying need of the age is for better men, strong men, active men, enduring men, men who will bring to their positions in life, together with the advantages of symmetrical mental and moral culture, the physical stamina of their grandfathers, and a hardiness of constitution that will not collapse beneath the strain of official position or succumb to the first withering blast of adversity. The teachers of our public schools can do more towards supplying this vital necessity of the times than can any other class of persons, through the physical training of the youth and children under their care.

Let us suppose that our ideal teacher has belabored his school board until an adequate supply of fresh air has been secured, which please remember means not less than thirty or forty cubic feet of air per minute for each pupil, has carefully investigated the water supply, and secured the carrying out of such measures as will guarantee its purity, and has fairly embarked in a course of physical training in which every pupil is required to participate; may he then consider that his full duty is done? I think not. There is a large field of individual hygiene which the teacher may cultivate with most excellent results to the welfare of his charges. The teacher should impress upon his pupils day by day, line upon line, those sanitary precepts by which the daily life and habits of each individual should be regulated, and in so doing he will sow seeds of sanitary truth which will bring forward an abundant harvest of more rapid and more stable intellectual growth, improved physiques, immunity from sickness and lengthened life.

Let the teacher make a careful study of dietetics, and then impart to his pupils in brief familiar talks, the chief facts relating to food and nutrition. The importance of this subject is emphasized by the definition formulated by an eminent zoölogist who describes an animal as a stomach with various organs attached. The business of the stomach is to supply the body with the material needed to renovate its tissues and its energies. As soon as the stomach fails to do its duty, the whole body begins to decline. Every tissue begins to suffer from starvation. Every bodily process flags. The muscles become flabby, the nerves become irritable, the brain becomes confused, and the mental powers languish. The stomach is to the body what the furnace is to the steam-engine. It receives the supplies of material out of which blood, brain, and muscle are formed, and which, through the wonderful chemistry of nature, are elaborated into thoughts, feelings, actions.

The old German proverb, "As a man eateth, so is he," is an exact statement of a scientific fact. If a man eats gross food his blood will be gross, his tissues will be gross, his brain will be gross, and he will have gross thoughts, and very likely will commit gross acts.

Prof. Alcott, the Concord philosopher, remarks: "The man who lives chiefly upon hog, is in danger of becoming piggified." The statement is perhaps a little overdrawn, as we know of several estimable people who breakfast regularly upon sausage, and dine upon pork roast, or boiled ham, with never a disturbing thought of the now familiar pork parasite, trichina, provided only they are guaranteed to be well cooked.

The young lady who lives chiefly upon pickles and bread and butter, with a liberal supply of mustard, washed down with strong tea or coffee, must be expected to have a temper as acrimonious as her diet.

The boy who wants to make the most of himself will take care that his body is built out of good material; in other words, will use discretion as regards the sort of stuff he puts into his stomach. The Hebrews could make brick without straw much more successfully than the system can make good brains out of strong coffee, Saratoga chips, and fried sausage.

The bustling business man sits down at a table in a down town restaurant, calls for a bill of fare, rattles of an order to the waiter, and presently finds himself surrounded with a dozen dishes containing as many varieties of abominable mixtures called "French cookery," which he supposes his stomach will convert into material for brains, with which he will be able to devise sharp schemes for money-getting, and which will again convert brains into dollars. But the transmutation does not take place according to his calculations. Half an hour after dinner his abdomen swells up like a bass-drum, his cranium feels like a cabbage head, his heart pounds away like a fire-engine, and he runs off to the doctor to get him to feel of his pulse, look into his eyes, and tell him if he isn't going to have a stroke of apoplexy, or if he isn't threatened with softening of the brain, from too much mental work, and if he had not better take a trip to Europe or visit some celebrated mineral spring, with a taste of sea water and a smell of perdition. If the doctor has the good sense and the bluntness of old Dr. Abernethy, he will say to him, "You are a fool and a glutton. Stop stuffing yourself with roast goose and cranberry sauce, fricasseed liver, pig's feet and *paté de fois gras*, and making a gormand of yourself. Treat your stomach decently, and your brains will be all right."

When one sits at a hotel table, and observes what sort of stuff people are trying to make bones, muscles, and brains out of, he is constrained to think that a human stomach must be made of cast-iron, or that there is a day of trouble and retribution coming. If you ask any of those people if they ever suffer with indigestion, they will invariably reply, with indignation in their tones, "Never." Watch the same people after dinner for half an hour, and you will see them gulping up offensive gases out of their stomachs, drinking noxious draughts of alkaline mineral waters at the drug store, or swallowing big doses of neutralizing cordial, never once thinking that the indigestible stuff which they bolted at the dinner table has anything to do with the horrible state of affairs under their jackets.

The race of gormands are going to die off pretty soon of fatty livers and apoplexy, but there is little consolation in this fact, since they are sure to leave behind them a rising generation of dyspeptics who are quite too prone to follow in the perverse ways of their predecessors.

Some years ago an itinerant clergyman, traveling through a western State, spent a night with a farmer, and in the morning sat down with the rest around the breakfast table, to prepare for the long horse-back journey which lay before him. The host invited him to ask a blessing upon the food about to be eaten. The reverend gentleman glanced over the table, taking a mental inventory of the food prepared for the dozen hungry mouths awaiting it. There were hot biscuits steaming from the oven, semi-transparent with lard, and yellow with saleratus; there were savory mince-pies, rich preserves, pickles, green as grass, coffee, black as ink, fried pork, fried eggs, fried potatoes, and a generous supply of fried cakes on the sideboard. Pausing a moment after his survey of the indigestible viands, with a solemn voice the clergyman said, "Friends, this breakfast is not worth a blessing;" and, concluding that a breakfast not worth a blessing was not worth eating, he went on his journey without it. The farmer doubtless considered the blunt preacher a very ungrateful guest, and it is doubtful whether the lesson was of any practical value to him; but certain it is that a great share of the breakfasts and dinners eaten are not fit to be blessed or to be swallowed.

The conventional lunch basket is a reliable dietometer by which we may measure the color, depth, and density of the popular ignorance upon this important physiological question. The rich cookies, mince-pies, tarts, and other goodies with which the loving mother prides herself in gratifying her little ones, are as appropriate material to form a corner stone for a monument as for the construction of a human brain. Is it any wonder that after dinner is the dull time in many school-houses? Is it any marvel that young America often complains of headaches and stomach aches and sundry other ills? The mystery is that the much abused stomach so long endures without a more vigorous protest its daily dose of dietetic abominations.

Considerable observation and experimentation has convinced me that the average student can do the best work mentally, and will preserve a higher state of health physically, upon a diet chiefly composed of milk, plainly cooked grains, and an abundance of fresh fruits. The idea which many parents entertain that children must eat large quantities of flesh meat in order to be strong and healthy is an erroneous one. Our best authorities in sanitary matters assert that a man is not necessarily carnivorous in his habits, and that it is quite possible for him to live "by bread alone," with a generous admixture of ripe fruits, edible nuts, and fresh milk, without ever testing flesh meat, provided he has no liking for it. I have no expectation, however, that the vegetarianism so much talked of in England is at all likely to be generally adopted in this country; but I am confident that the excessive use of flesh meat by children is an important cause of morbid, nervous irritability, a growing evil among the young, the consequences of which are far-reaching. Milk is a perfect substitute for all the good qualities of flesh food; and it is not impossible, as another has suggested, that parents may often find cow's milk far better than cow's hide in the management of hot-headed and refractory sons.

The hydra-headed monster, dyspepsia, with its numerous progeny of headaches and neuralgias, nervous debility, hyperæmias, anæmias, and neurasthenias, is rapidly subjugating the whole American race, and nothing but a regular crusade against its chief stronghold, a fashionable *menu*, and that refined but most unmerciful mode of food adulteration known as "French cookery." Let the principles of rational dietetics be inculcated into the minds of our boys and girls while they are solving the problems of long division and tracing out the lakes and rivers of North America, and we may hope to make some headway in the direction of a return to common sense and healthful methods in diet.

The proper clothing of the body, particularly as regards underclothing and suitable protection for the feet, is another question upon which the teacher may remark with perfect propriety, and with the possible result of diminishing the number of absentees through colds, sore throats, and other disorders arising from improper exposure during the inclement months of winter and spring.

Another branch of school sanitation in which teachers ought to be interested, is the detection and restriction of contagious diseases. Every teacher should be familiar with the early symptoms of diphtheria, scarlet fever, measles, and all the so-called children's diseases. Such information can be obtained from any competent physician, and by its aid the teacher will be able to detect the first beginnings of the disease, and thus prevent, in the majority of cases, the propagation of maladies which often sweep through communities with the violence of a tornado, never ceasing their ravages until there is no more fuel for the flame, till the last family is childless. Any teacher who wishes information respecting the proper methods of dealing with these diseases will undoubtedly be able to secure the knowledge desired in the leaflets and pamphlets published by the State Board of Health, which may be obtained of the Secretary of the Board, Dr. H. B. Baker, of this city (Lansing, Mich.).

The duty of personal cleanliness is one which is not so generally regarded as it should be. A few years ago I was consulted by a man past middle life respecting a malady which evidently was the result of deficient skin activity, and recommended as a measure of treatment a warm bath. An expression closely akin to terror appeared upon his face, as he exclaimed: "My dear sir, a drop of water has not touched my back in forty years." His fears that he would take a fatal cold by the operation were so strong that no amount of urging would induce him to take the prescription. The habit of frequent bathing formed in early life will save an individual not only from this species of hydrophobia, but from a vast number of minor ailments as well as grave disorders, and particularly the host of inconveniences which arise through the abnormal susceptibility to taking cold.

I would prefer to close these remarks here, but should not feel quite conscience-free without saying one word respecting the duty of the teacher as regards moral hygiene. That there is a tendency toward a decline in morality and an increase of vice among civilized nations is a fact to which thinking people can no longer close their eyes. Among the most efficient causes of this retrograde is the familiarity with vice in its grossest forms, which arises from the fredom with which the newspapers of the day deal with crimes of this sort, with little or no attempt at delicacy of expression, and usually dwelling with unnecessary particularity upon the details of crime. Prurient novels and other sensational literature, whose name is legion, as well as the grossly obscene publications which Mr. Comstock has labored so efficiently in suppressing, are also justly chargeable with a large share of the retrograde in this direction.

One of the most conspicuous examples of this lowered moral tone as relates to matters pertaining to the sexes, is often to be seen in the loss of that modest reserve in their deportment toward each other which characterized the boys and girls and young men and women of a generation ago. When it is remembered that modesty and proper reserve in manner are among the most effective safeguards of purity, it will be readily seen that the marked declension in manners, which is so apparent in this particular, tends very strongly indeed to a corresponding declension in morals. We dare not venture to more than hint upon evils the appalling extent of which is known only to the experienced and observing physician; but is it not possible that the army of teachers of our noble State might do something to check this terrible tide of evil through the inculcation of those principles which inspire a love for purity, abhorrence of vice, and by carefully guarding the young against the first approaches of those influences which tend in a downward direction.

I have not thought necessary in this paper to dwell upon the importance of properly constructed desks for securing correct positions, abundance of sunlight, properly admitted, the hygiene of the eyes, and numerous other topics of interest in this connection, since those subjects have been so often and so well discussed that the average teacher is undoubtedly conversant with them.

In conclusion, I would say that it is the duty of every instructor of children and youth to look upon the human beings under his care as pliant clay, capable of being molded into almost any form, susceptible of development into characters, beautiful, genuine, and useful, or the reverse. Let the teacher consider that these unfolding human buds are not to be treated simply as mentalities, to be cultivated intellectually without regard for other interests, but as human beings, complex mechanisms, possessed of marvelous qualities of body, mind, and soul, to be unfolded and developed simultaneously and symmetrically; and let him teach each boy and each girl that it is the duty of every human being to make the very most of himself, and that nothing is more important to one preparing for his life work than that he should develop and maintain a high degree of physical health. Does the boy desire wealth? Health has millions in it—millions of happiness and usefulness, even of material wealth. A man without health, even if his burglar-proof safe contains the wealth of a Rothschild or a Vanderbilt, is poorer than the ragged newsboy whose clarion voice resounds with robust health, and whose rosy cheeks tell of the richness of the vital fluid in his veins; or the Italian peasant boy whose daily toil gives him a vigorous appetite for the handful of chestnuts upon which he dines. Let the teacher tell the boy that the invalid millionaire is rich in cash, but poor in comfort. He has a heavy pocket-book but a heavier heart; a table spread with costly dainties, but no appetite; a palatial abode, and a pain-racked body in it. The nondescript monster, dyspepsia, glares at him from every savory viand at the dinner table. When he ventures out to walk over his domains, a vexatious rheumatism causes him to make wry faces at every step. If in his magnificent turn-out he seeks invigoration in the morning air, a veritable fiend, which the doctors have named *tic-douloureux*, drives him back to his over-heated chamber, writhing with pain. When he lies down upon his luxurious couch, he sleeps not the sleep of health and physical soundness, but rolls and tosses restlessly about until a horrid nightmare settles down upon him, and holds him in its deadly grip. The glorious morning sun beams not with joy and gladness upon such an one. He rises languishly from his couch of torture, and begins another wretched day. The wood-chopper, with his brawny arm, his magnificent digestion, his sound rest, his ignorance of "nerves," nightmares, and neuralgias, is the envy of the millionaire, and justly so; he is the richer man of the two. The one has golden wealth, the other glorious health, and finds millions in it, though his pocket-book is thin, and his bill of fare a crust.

THE LAW OF LIBERTY.

BY LUCY A. OSBAND, CHAIR OF NATURAL SCIENCES, STATE NORMAL SCHOOL.

Some years ago, before the liberal element gained ascendancy in our institutions of learning, there appeared, in a New York daily, an attack upon the prevailing methods of college discipline. The feature to which objection was particularly urged, was unfairness. The faculty, it was charged, even in cases of serious consequences to the student, acted as judge, jury, and prosecuting attorney; and denied to the accused the right to meet his accuser, or to employ counsel for his own defense.

In many respects the attack was ungenerous. The writer ignored the priceless services which the college had rendered to liberty. He did not comprehend that the very narrowness of the old regime compelled the concentration of force that begets energy. It did not occur to him that loftiness of purpose is, to itself at least, a guaranty against wrong. Nor did he reflect that strenuous souls, fitted alike for dominion or martyrdom, draw the elements of their strength from stern motherhood. But one thing he did know in the inmost recesses of his Yankee nature,—he knew that the very soul of liberty is *fair play*, and that the right to be heard in one's own defense lies at the bottom of things. Possibly something in his own experience instigated the attack; but it was regard for others that pointed his appeal to teachers not to give a verdict against a pupil, without first "giving hostages to liberty" by arguing the case for the defense.

That appeal was based on the insufficiency of the pupil's safeguards; and it awakened in the heart of one teacher, at least, an instinctive impulse to take sides with the defenseless party; an impulse which finds expression in the present paper in defense of the rights of the pupil against the encroachments of the school. Not but that some very excellent things might be said about the school; but surely that is no reason why we make of it a Moloch to which the children shall be sacrificed. Too much has already been said about the school to the neglect of the children; let us reverse the process, and think of the children first, and the school and teachers afterward.

In considering the child's rights, I know of no better foundation on which to build than the Declaration of Independence; for if we concede to the man the rights to which that document declares him entitled, the child ought surely, under proper guardianship, to come into some of the benefits of his inheritance. In other words, the community—or the teacher, as its representative—should be required to protect his life, to guarantee his liberty and to promote his pursuit of happiness.

In respect to the first, the law indeed provides for protection from violence, but what provision is made for guarding the health and vigor which give to life its value? To be more definite, in how many graded schools is the health of the child looked after as carefully as his obedience? How many schools provide means for physical development? How many examiners require proficiency in school hygiene? Where is the Board of Education employing a physician to lecture to teachers on the nervous system, or on the requirements of child life? How often is the sanitary aspect of school regulations discussed at teachers' meetings? Probably teachers are in theory no more careless of the physical welfare than other people; but they fix their attention so continually upon intellectual aspects, that they forget how exceedingly intimate is the relation between thought and the mechanism through which it is produced. Yet there is nothing which more nearly concerns the child's welfare than this very relationship; and the teacher ought to be especially intelligent, not only to discern those morbid conditions which betoken disease, but to understand how the daily regulations of the school may operate to diminish physical vigor.

It has been beautifully said that the nervous system is the border land between the spiritual and the material; but it might be more truthful to say that it is the material medium through which spirit manifests itself. Every new discovery in brain function emphasizes this fact. What does it mean, for instance, that different portions of the fore-brain rise in temperature as the different senses are stimulated, save that in the change from sensation to intellection, brain substance is actually consumed? What does it mean that more phosphorous is eliminated from the system during active thought than when the brain is at rest, save that the cells bathed continually with lymph rich in phosphates have been more actively at work, and therefore have wasted more. And what determines uniform health, save the constant supply of as much and as good material as is constantly consumed? Without going into the details of school hygiene, let me call attention to two things bearing directly upon this question of waste and repair. Let us consider, first, the length of time during which the developing brain may be safely kept at hard work. This will help us to estimate the amount of work that may be assigned for home study, and also the length of school sessions.

No one will question the evils of excessive night study. Upon eye and brain and nutritive organs the strain is alike severe. Perfect repair requires perfect slumber. Sleep not only "knits up the raveled edge of care," but it repairs the ragged brain surfaces as well. Yet the "sweet restorer" does not come till the distended capillaries are relieved and the hard-worked cells have opportunity for their own rebuilding. Now the late-working student goes to bed with engorged blood-vessels; his sleep is disturbed; brain repair is prevented; and his capacity for resuming work is lessened. Sound sleep and plenty of it is absolutely necessary to the student's welfare, and school work should be subordinated to this necessity.

With regard to the length of school sessions, we must remember the conditions under which the pupil is obliged to do his work. To study in a quiet room, with ventilation and temperature under our control, is far less difficult than to do the same work in the vitiated atmosphere of the school-room; yet we expect children, restless, easily disturbed, and without habits of application, to be subjected to such conditions each day, nearly four times as long as we ourselves are willing to be detained in church. There is this difference, however, that the child must have his lesson or have his period of confinement extended; whereas we, if we can only assume an expression of profound reflection, may slip off into dreamland at will, and be let off with no penalty at all, unless the deacons see fit to charge us for lodging. Under such circumstances ought there to be any question with regard to the necessity of school recesses? One would think not, yet it is a fact that many teachers seem to consider this little happy breathing spell as so much lost time. So strong is this tendency, that the faculty of a medical college in Massachusetts have felt called upon to protest against any diminution, even, in the length of recesses. So vitally important is it to the child's welfare, they emphatically say, that no child should be deprived of it, except for the most serious offenses. And yet hundreds of children in Michigan are deprived of it without being guilty of any offense at all.

I suppose we are all agreed that attention is the *sine qua non* of good work; but we ought to know that attention produces a rapid expenditure of nerve-force. So if we require better attention, it is good logic to shorten the session. But how shall we shorten the session? By omitting recess, and compelling the student who was attentive an hour and a half before to be attentive two hours and a half? Think, for a moment how steadily during that additional hour all the conditions of good work are deteriorating and ask yourselves whether either child or work will be the better for such an arrangement. Observing teachers cannot fail to have noticed that the pupils who enter most heartily into the spirit of recess, are the ones that hold their own in a long course of study, and in the strain of after-life. So let recess be sacred. Let school-room, corridor, and lawn be consecrated, for a brief period, to recuperation. Release the attention, rest the weary nerve-centers. Let the happy feeling of relief, the stimulation of new centers of activity under the enlivening influences of social intercourse, change the entire train of thought. This gives not only the needed rest, but through the intimate relation between the sympathetic and cerebro-spinal systems, gives renewed vigor, and favorable conditions for resuming work.

I have dwelt upon this matter of frequent breaks in the periods of strain because I believe that in striving after ideal work we are sacrificing those who must do the work. I am aware that rose-colored reports come to us from those who are just entering upon the experiment; but I can not forget that the danger is none the less real because it lies far ahead. Nature never forgives a physical sin, how long soever she may postpone the day of reckoning. And so I dare do no less than protest against the abrogation of recess as a crime against the children committed to our charge; and I believe the testimony of the medical profession will bear me out in the protest.

The second matter which bears upon this subject of waste and repair is the influence of the emotions upon mental work. I suppose there are few teachers who have not seen their best pupils fail under the excitement of examination. Such a paradox is not without its significance. Habitual brain-work proceeds somewhat automatically and therefore naturally and easily, but let the train of thought be interfered with by anxiety and apprehension, and the nervous waste is increased *just* in *proportion* to the *amount of effort required to fix the attention.* Disturbing forces are therefore exhausting forces; they lessen the power to do good work. Herein lies the objection to multiplying these periods of excitement by frequent examinations. Manage them as discreetly as we will, the strain and anxiety which precedes and accompanies them prevents the proper repair of tissue. This is the explanation of the tired feeling which follows them. We call it reaction, but it is really a state of exhaustion, which unfits the pupil for resuming immediate work. The teacher, too, suffers as well; for with all the extra night-work on examination papers, how can the demands of the daily work be met, except at an expense of effort that is ruinous. Prof. Bragdon of Auburndale publishes that, at Laselle Seminary, examinations are abolished in the interest of health. Might it not be well for teachers generally to re-canvass this matter, and see whether the results obtained by our present system are worth the exorbitant price we pay for them. Possibly we should find it best to throw out some of the superfluous gearing of our machinery, and make available for better uses the power now wasted in worse than useless friction. The subject is not one of trivial moment. Thoughtful men see, in this constant excitement of a nervous system already too sensitive by inheritance, the seeds of a frightful harvest. The buoyancy of youth may counteract, in part, immediate results, but later life will surely reveal the place of weakness. Dr. Ray well insists that many cases of insanity, attributed to recent causes, may with almost absolute certainty be traced back to some period of excessive mental strain during the time when the brain was immature and developing.

From Eden downward, the acquisition of knowledge has been under penalty. The sorrowful page of childhood's history is that on which the story of the school is written. In Rome, so the domestic historian tells us, there was a law forbidding to begin school before five o'clock, because the morning nap of the luxury-loving citizen was disturbed by the sound of blows and the screams of the children. We all know what brutality, in later times, took cowardly refuge behind the regulation that no tales were to be told out of school. We congratulate ourselves that these gross outrages are things of the past; but we may well question whether we have not substituted something more cruel because more refined. The tingling back is soon at ease; the torture which shattered nerves inflict, may last for a lifetime.

How much liberty is good for the child? Suppose we claim for him, as for the man, the right to pursue his own way so long as he does not interfere with the rights and privileges of others; this would not be a plea for lawlessness, nor for sugar-suasion; but for training in self-government. The same principle that grants to the child his own rights, requires him to respect the rights of others. This teaches him to discriminate between the use and abuse of liberty, and is, of itself, an education. But there are some schools, as well as some families, in which the whole system of government seems to be associated with the idea of repression. Every rule in its code begins with "Don't." Now all the impulses of a child's nature urge him to "do;" he *must* "do" if there is any snap about him. But this continual nagging of petty prohibitions, like so many pin pricks, is a continual source of exasperation. There can be no development of self-respect or self-control under it. Omit the irritation, and you may, if you will, make the child a helpful factor in school or home government. Make him responsible for his share of the general movement, and he will be proud to relieve you. Of course there will be children whom neither trust nor tact can manage, and these should quickly feel the strong hand of authority. I have known schools in which the order was complete enough for human uses, yet the children were never humiliated by the presence of a teacher to watch their progress through the corridors. The bearing with which they entered and left the room, with no further signal than an indication of time, showed the disciplinary influence of individual responsibility.

Inasmuch as the school is a place of preparation, why should we make its methods and conditions so dissimilar to those which must be met in after life? Why, for instance, should the ban of silence be placed upon the corridors of our school buildings, and the children be expected to move about like convicts in prison rather than like cultivated people from whom the amenities of life are expected? Man is a social being. His success in life often comes from knowing how to meet men. What better thing has the school to offer to the average pupil, than the training in manners, bearing, and self-control, which ought to be afforded by brief daily opportunities for social intercourse such as noon-time and recess afford? Accustom children to handle themselves in a crowd, not by military drill, but by self-imposed observation and restraint, and you have taught them something about finding their place in life, and taking up its duties. We underestimate the influence of slight but constantly recurring things. To accustom the child to move mechanically by a set of signals is to initiate a habit that will make it easy for the man to follow the same impulse. To accustom him to find his place intelligently, is to make it easy for him to do the same thing in after life. The former is the old-world system of moving men in masses. Almost daily we see its outcome in the ease with which strikes and riots are inaugurated among our foreign population. The latter trains to individual action and develops the qualities which will enable the man when necessity arises to stand alone. Trained to the *habit* of liberty he instinctively rebels against the dictation of a demagogue. Far distant be the day when Americans can be made the tools of these apostles of social disorganization.

The play-ground is another place where the child may be taught by liberty to discriminate between the use and abuse of things. Here again I must assume that the teacher who is fit to be trusted with children has firm hold of the reins, even while he keeps them out of sight, for I protest against everything that savors of espionage. All that is perverse in human nature comes to the surface as soon as we know we are systematically under the eye of a monitor, and honor and high-mindedness are forgotten in our sense of humiliation.

It is well for the teacher often, and always unexpectedly, to be present upon the play-ground as a participant, or a deeply interested spectator; but he is not a true *educator* if he cannot control in his absence.

Again, the child is entitled to liberty in the class-room,—liberty in modes of thinking, modes of doing. Set methods in teaching are entitled to no more respect than other straight-jackets,—they indicate a bad state of things somewhere. What we want is a kind of training that shall preserve, not obliterate, the original peculiarities.

The tendency of the times sets towards dull uniformity. Oppose the tendency by compelling the child to find the way out of difficulties himself.

[illegible] but do not, as you respect the
[illegible] Be patient with imperfect results.
[illegible] perfect one at second hand. Truth
[illegible] or otherwise; and if the child
[illegible] that fact an incentive to greater
[illegible] gathered his pupils around him
[illegible] dissecting under his supervision,
[illegible] was new to the great scientist him-
[illegible] their toil, when in his own great-
[illegible] of their discovery; but there was
[illegible] thought that the work already done
[illegible] come.

[illegible] them the fact that rote-work is
[illegible] was truer word spoken. Rigma-
[illegible] as a hand-grenade will put out
[illegible] was the hobby of the schools,
[illegible] it was an admirable discipline.
[illegible] comatose condition,—paralyzed by

[illegible] and liberal, but its counterfeit
[illegible] own method. I have an idea
[illegible] there may be two or three ways of
[illegible] the world are the helpless peo-
[illegible] that way blocked. Neither do I
[illegible] strength upon elaborating and per-
[illegible] soon as a system is finished it is
[illegible] fossil teachers, may admire
[illegible] for it. A perfect system must
[illegible] to induce activity. If he can
[illegible] and mind of his pupil, in glow-
[illegible] for the result. Keep the child,
[illegible] over-anxious about his methods.
[illegible] Resting on this truth the great
[illegible] such preparation of the soil as
[illegible] results the bountiful harvests have
[illegible] and had the prince of educators
[illegible] and formal system, instead of
[illegible] by developing manliness and
[illegible] Brown would have gone to ruin
[illegible] chapel and the warm, human
[illegible] the master's level, and secured
[illegible] and most unselfish friend.
[illegible] Arnold a failure; but what
[illegible] for the world's benefaction
[illegible] Rugby?
[illegible] one other interference with
[illegible] I mean that invention of
[illegible] numerical standings. Were
[illegible] a ready pen, I would enjoy
[illegible] As it is, I must pass to
[illegible] happiness. Here, again, I plead

for generous measure. Happiness is childhood's birthright. The world will spoil it all soon enough. The sports which are so dear to the heart of the child are so because they are a necessity of his nature. They develop and strengthen, and educate, while they amuse. So I plead for the restoration of the old-fashioned play-ground with its noisy games, where the lungs were developed, the muscles strengthened, and the blood sent coursing through the veins. Lawn and flowers are lovely, I admit; but I would far rather see the roses on the cheeks of the children. The cost of keeping the lawn would be better invested in some appliances for amusement. The Catholic school at Ypsilanti has a strong and cheap merry-go-round for the little ones. I would like to see its duplicate in every school yard in Michigan. Hearty play prepares for hearty work and gathers up the forces to withstand strain. We have all known children who were trained by constant repression to be always tidy, always proper, always quiet; and we have seen these children when diphtheria or scarlet fever came, succumb to disease, while their harum-scarum playmates came through almost unscathed. I wonder if a happy, sturdy childhood would not go far towards carrying men safely through the attacks of moral diphtheria to which they are exposed in later life.

The memory of our school days! How much that we prize would be obliterated were we to leave out from our recollection the sports of the playground and the happy associations connected with the old-fashioned recess! The child of to-day has his future still before him. Let us think twice before we decree that he shall never solace himself with the memories so precious to us.

The pursuit of happiness, however, implies more than monetary enjoyment. It looks forward to the fruitful years when the early seed shall ripen to the harvest. In preparation for these years, the school is bound to provide the opportunity for seed-sowing. Does the school so provide? Let any one familiar with the general working of graded schools answer. I have seen a generation of boys grow up to manhood with the merest rudiments of an education—with not enough knowledge of arithmetic to transact business. They belonged to that large class whom poverty compels to "work out" a portion of the year. Every autumn they were put back because they had not completed the year's schedule; and so year after year of precious time was lost because no man cared enough for their welfare to sacrifice a little routine. How strange that the indifferent teacher who permitted this wrong did not reflect that some day these boys would be voters, and the fate of the school system might be determined by their votes?

There have been other schools (I hope there are none now) which have required the child who failed in a single study to review the whole group of studies. Can anybody tell on what principle the child who has failed in grammar should be made to review arithmetic, in which he has not failed? Could the arch-genius of stupidity contrive a better plan for the propagation of dullness? Why all this striving after uniformity? Even a machine does not have all its materials of the same fiber. A live child will frequently be found to have some fibres of steel and some of malleable iron,—shall we let the steel rust out in idle waiting while we are striving to put spring into the soft iron? Never! Let the active faculties push ahead. The mind is a unit. Advancement in any direction will at last bring up the laggard faculties to their proper place. We have been so long accustomed to think of the class rather than the individual that the absurdity of advancing children by platoons has ceased to impress us. In this matter we might learn a practical lesson from the commercial schools. They have been compelled to stand or fall by the results of their work, and experience has shown them that they get the best results by giving their attention largely to individual training.

This is but a repetition of the experience of the academies of the Eastern and Middle States. Those institutions were largely dependent upon tuition for their income; and hence were obliged to adjust themselves to the needs and preferences of the students. And what a class of men they send forth! Men not so much learned as educated,—men strong in judgment, fertile in resources, ready in debate, prompt in action,—men, in short, fitted for the practical duties of life.

In still another way does the child suffer loss by lack of liberty. A course of study which must be taken in order or not taken at all, makes too little account of the value of time. At one time a prominent school in this State required twenty-five terms of arithmetic before taking up algebra! Twenty-five terms! How calloused the mathematical skin must have become in that time from mere force of impact! I have never learned whether anybody ever survived to reach algebra; but I would be sorry for any twelve-year-old, of ordinary brightness, who could not master all the arithmetic and algebra in a high-school course in less than half of twenty-five terms. Dr. J. M. Gregory goes further, and claims that the average child of ten or twelve years can learn in one year all the arithmetic necessary for practical business life or for the higher courses in mathematics. I am glad we are beginning to get rid of this reproach to our intelligence. The department school is a prophecy of better things. I wish we could still further simplify matters so that the child might not be kept dinning at the same old subject after the theme has lost its freshness and the mind its elasticity.

Why may not the child, after completing an elementary book, drop the work entirely until able to master a complete treatise on the same subject? The intervening time might then be given to other subjects; and thus there would be opportunity for choice, and for rapid advancement with far less expenditure of time and labor. We women say of a housekeeper who works continually and makes no progress, that she "trots all day in a half-bushel." Could we not dispense with some of the "half-bushels" in our school work?

I have thus mentioned a few points in which it seems to me school and pupil would alike be gainers by greater liberty. A careful observer cannot fail to see that the times demand individual development, moral independence, physical endurance and boundless enthusiasm. In order to secure these things we may find it necessary to sacrifice the ideal school with all its elaborate regulations as a thing too nearly perfect for practical uses. Truth, not method, is the ultimate goal. The Great Teacher emphasized this fact in His own teaching. But beyond the truth, and attainable through the truth, he placed that condition of the soul in which its highest faculties are exercised under the law of liberty. "If the truth shall make you free, ye shall be free indeed."

DISCUSSION.

Supt. F. M. Kendall, of Jackson, called attention to the fact that the great destroyers of life are *care*, misery, *worry*, *fretting*, crime and dissipation, and not exertion, physical or mental.

Teachers need to guard against influencing the children by their own ill feelings. A grim, cold teacher chills the child. The laws of health should be studied and observed by the teacher, not only on her own account but because of the effect of her feelings and manner upon the entire school. The intimate relation between thought and the mechanism of thought was referred to in this connection. It is the duty of teachers to cultivate a cheerful spirit. Teachers often overwork themselves unnecessarily.

Examinations were next referred to, and the plan followed in Jackson of examining pupils without their knowledge of the fact, was explained. The belief was expressed that such a plan, if followed, would do much towards preventing the excitement and worry, on the part of the pupils, which attend examinations, as usually conducted.

The ground taken by the paper in regard to the liberty of movement and action in the halls and school-rooms was not endorsed. On the contrary experience showed the necessity of system in the movements of pupils and a firm hand in dealing with them. There is not sufficient respect for authority. Liberty would degenerate into license.

The school teacher has also the right to "life, liberty, and the pursuit of happiness," which somebody is "bound to respect."

THE VALUE OF MILITARY TRAINING IN SCHOOLS.

BY MR. GEORGE S. WHITE, JACKSON, MICH.

My theme was selected from a considerable group of subjects proposed for consideration at this meeting. These subjects all related to the *physical* well being of pupils and of teachers, to the means of gaining and conserving physical power, and to the acquisition of skill in using that power in accomplishing our designs.

My choice from this group was determined partly, doubtless, by my former military experience, and partly by the fact that it was made while the workings of the military department recently established at the Agricultural College were under my observation, but chiefly by the settled belief that the subject is worthy of more careful and general consideration than it has yet received from broad-minded and far-seeing educators, legislators, and boards of control; and with this belief was coupled the fear that no one would invite your attention to the theme in this, which seemed its proper connection, if I did not.

But those topics which seemed nearest of kin to my own and which were relied upon to prepare the way for its consideration, do not appear upon the programme.

Their absence has made this much explanation proper, if not necessary. The same fact has also modified my treatment of the subject.

The plan originally was this: Others were to point out the means most generally available for enriching the blood and making its currents quick and strong, for expanding the lungs, strengthening the muscles and bringing them under control, for making the brain clear and steady, and for straightening the numberless crooks and twists which are prone to establish themselves in studious pupils.

We were then to say that military drill, where it is applicable, affords an admirable means for accomplishing all these ends, and aids in disseminating a kind of knowledge of great value to the public.

Now we approach the subject from a different direction and ask you to consider at the outset this proposition. The State has a vital interest in the widest practicable diffusion of elementary military knowledge among its citizens. We believe that only a very few would deny the proposition. We also believe that many, perhaps most, would admit the proposition with easy indifference.

Now no drowsy assent will satisfy our present hopes; therefore we beg leave to still dwell upon the State's real interest in the matter.

Military power is the real, solid, bottom, foundation stone, whereon all government rests. In these latter days we have learned to hide the rough ugliness of this lowest support and to build in view above it with the more comely blocks of constitutions, and treaties, and arbitration, and diplomatic skill, and fair laws, and justice, and knowledge. But all this fair superstructure would surely fall without the rugged strength of military power to bear it up.

From the earliest times till now that government whose sword-arm was struck by any palsy, has perished; and to-day is not separated from yesterday by any millenial tokens which justify the hope that, to-morrow, right may safely roam the wide world over unbacked by might.

We know that some States, too small to fall to pieces, too poor to excite cupidity, or protected by the mutual jealousies of their neighbors, have had a long life. These are apparent, not real, exceptions to the general rule.

The fate of any European State which may neglect its preparations for war is easily foreknown. Here, if anywhere, its arts may be forgotten with impunity. But thrice already has our own Government been *compelled* to draw its sword in a righteous cause and put forth all its strength, and it has unsheathed it once in a war—the Mexican—which, whether just or unjust, has led us through the civil war to terrible retributions, and then to a glorious deliverance.

Not counting the war with Algiers or Indian wars, the average interval between our wars has been hitherto about twenty-five years. Our Government was engaged in its four principal wars during about sixteen of the ninety years, from 1775 to 1865, or more than one-sixth of the time.

It requires, then, no bold prophet to foretell that we shall be called upon hereafter to wield the weapons of destruction. In what quarter the occasion for war will arise is a more obscure question. We see about us many signs of disturbance, and sometimes violence occurs. We have faith that patience, wisdom and forbearance will settle these threatening domestic questions without proceeding to dire extremities, but we know well that the presence of men trained in arms, accustomed to obedience, and taught to act in concert is needed to keep the peace while the heated argument proceeds.

A reasonable preparation for war and display of military spirit throughout the north in the years preceding our civil war would surely have prevented or greatly shortened it. In those days there was little effort to maintain a respectable militia. The efforts which were made here and there were seldom looked upon with respect, and were often met with ridicule. So our Southern brethren, judging correctly that we were in no posture for attack or defense, and erring in their judgment that we lacked spirit for either, ventured their great assault. In due time their presumption received its merited rebuke.

Two men not apt to err, Seward and Grant, judged that the war would be of short duration. And all men now see that it must have ended quickly if the North had been ready at the outset to show that overwhelming superiority in military resources which it always possessed and did at length display. One generation has learned at great cost the folly of allowing its military resources to run to waste and its military spirit to die out, and of permitting any one to think it cannot or will not fight for the righteous cause. Having so learned its lesson, that generation now shouts its warning to the next, bidding it be prepared in body and in spirit to defend whatever precious thing it holds dearer than gold or limb or life.

The warning is timely. A word on that point. When the war of the Rebellion closed twenty years ago and the armies which had contended in it vanished, dissolving into the ranks of citizens, we had little need to encourage the organization of the militia on which this nation always has relied and always must rely chiefly for it defense. We had at our beck great hosts of soldiers in the full vigor of manhood, and trained in the sternest and best of all schools. We were almost a nation of veterans. Then it was well enough to be contented with only so much organized militia as would answer for a good police force, for it was safe to trust that the veterans would throng to their standards at the bugle blast of any great emergency. Now these men are fast passing beyond the age of military service.

Now the lesson of eternal vigilance and constant preparation, taught so thoroughly by our last war and mentioned before, finds its application. Now the duty of enrolling the youth of our land who will give spare time to military exercises, and of providing for them the best obtainable instruction, stands plainly revealed. I read the story of the changing conditions and needs written in living characters last summer. It was at Fort Wayne, Ind., while the soldiers and sailors' reunion was being held there. One evening a battalion of four companies—militia and independent—from Michigan, went, by invitation, to hold their dress parade in the camp of the veterans. The old soldiers were formed in a long line to view the parade. Then were seen in one line forms erect and strong, crowned with the glories of youth and hope and promise; in the other grey heads, bent forms and furrowed brows. And I also saw and heard that, when the soldiers of to-day and of to-morrow did reverence to the soldiers of two decades ago, the old-timers forgot to chaff at new uniforms and bright buttons, and expressed, both by their demeanor and by the thoughtful words of their commander, the satisfaction they felt in meeting face to face so many representatives of the class on whose shoulders must rest the burdens to which they were no longer equal. The veterans are ready to receive the citizen soldier with approval and encouragement.

If you also perceive that the State has real need of him and are ready to meet him with respect; if you are ready to join in teaching every stalwart youth in the land that he ought to prepare, according to his opportunity, to perform two fundamental duties of American citizenship, one to vote honestly and wisely on every election day, the other to fight valiantly and well, in his country's just cause, then my desire is, so far, fully gratified.

We may now properly ask what the schools can do towards imparting this instruction. But we must not talk or think as though nothing had been done about it already. We must rather inquire what has been done and then consider how we can advance the work.

The national government has provided for the thorough instruction of professional soldiers at West Point. We are not called upon here to do more than note this fact, since our thoughts are occupied with a lower grade of instruction, that pertaining to "Minor Tactics," including the manual of arms, the position and movements of the soldier, and the company drill. The national government has also provided for instruction of this grade in the following manner.

Congress has enacted that, when any college or university giving instruction to not less than one hundred and fifty male students shall make proper application therefor, an officer of the regular army may be detailed as military instructor in such school, and the necessary arms and equipments may be issued to those receiving instruction. It is, however, provided that not more than forty officers shall be so detailed at one time. The military department at the Agricultural College is equipped and instructed under the provisions of this act.

Our State has made no provision by law for giving in its schools the instruction here proposed, but the policy of the State government revealed in the approbation it gives to independent companies and in its readiness to discharge well instructed men from its militia in order that other men may receive instruction in their places, shows a desire to disseminate this knowledge, and warrants the belief that the legislature would, if asked to do so, second any well directed effort to introduce military instruction more generally in our schools.

It is evident, then, that schools wherein enough young men, fifteen years or more of age, to form a company, are gathered, offer the best attainable facilities for giving the instruction and training which both our State and national governments seek to disseminate. The pupils are likely to be of that class of the people which learns such lessons most easily. Their age affords a good guarantee that the knowledge gained will be kept, and strong presumption that the recipient has before him many years of life in which to make it useful. In the case of some military companies fully half the work of some members consists in going to and from the meetings. In school the company is already assembled. The work of the drill-room is often added to a full day's work at manual labor. To most students it would come as wholesome relaxation from mental employments. Some students isolated at home would join their comrades in these exercises at school, and thus get the training which they would otherwise wholly miss, while many more would go to their homes prepared to give valuable help to companies already formed, or to organize and instruct new ones. By all these means the ends of the State would be subserved in an economical way.

The expense of this must be considered. To begin low we will use cheap daylight and all outdoors for a drill-room. This costs nothing, but subjects us to the vicissitudes of the weather. It does not afford the conditions for the highest success, but respectable progress may be made under these conditions.

You have seen the readiness of the United States to furnish the most competent instructors without pay, and I believe that quite competent instructors can be found in most cities of our State who would find their reward in their work. You have also seen the readiness of the authorities to foster these enterprises by furnishing arms and accoutrements, or those serving passably well for purposes of drill can be bought for a small sum. There may be some expense for their proper storage and it will cost some trouble to give them proper care.

A uniform can be bought cheaper than another suit of the same quality, and when used for common wear there is positive economy in buying it.

After all our present purpose is merely to call attention to the necessary things which may cost money, but whose cost will vary greatly. No great outlay is necessary, while there is room for an expenditure which will content the most prodigal.

We have seen that a course of drill for an hour each day, under a competent instructor, would accomplish results of value to the public. We are now ready to maintain that the same course would confer great benefits upon the individual pupil and promote the general purposes of the school.

How to make sure that all students shall have a certain amount of regular and moderate exercise, and not be left entirely to the guidance of varying impulses, is a question of perpetual interest to those who take thought for their welfare. We believe no other answer to the question so good as the one here indicated can be made.

On the drill-ground books and thoughts of books are banished from the book-worm's mind. Exercise, moderate but not aimless, sends the currents of the blood coursing through muscles wearied by too much rest and sweeps the cobwebs from the brain. The intellectual faculties are scarcely at work, they are not free to roam, they are not idle. They merely stand at attention. So the whole man finds rest in employment. My muscular, full-blooded boy who turns handsprings and jumps fences, who after a three hours' session at school tears home at a run, clearing the sidewalk as he goes, and who is a constant danger to himself,—this boy, after an hour's drill, walks quietly home, allowing peaceful pedestrians to make their way unthreatened, and relieving his friends from fears of ruptures, dislocations, and broken bones in his own precocious structure.

So we take the wire edge off a stabled colt before we turn him to pasture, that is, if the colt is deemed worth the trouble. Our treatment, therefore, tends both to bestow physical vigor and to abate excesses.

Teachers are often at their wits' end to know how to correct lounging and uncouth habits of posture and movement into which their pupils have fallen. In those schools where the pupils spend little time under the teacher's eye their power seems limited, indeed, to correct these faults. Even under the most favorable conditions, their correction involves wearisome reiteration and some distraction of thought from the work of mental training; and when the object aimed at is attained it is only an improvement and not a complete success. Students of military science have carefully determined and prescribed the pose which is best, which gives the freest play and fullest effect to all the organs of motion, and with patience and persistency they conform the recruit to this model. The means for doing this have not been neglected. Our drill does not consist of marching and facing and wheeling and the manual of arms alone. Before these comes the setting up process, a series of movements thoughtfully planned to give every muscle and joint its proper place and freedom. So we set our recruits up and hold them up for an hour each day, and personal pride and company pride help to prop them up through all the intervening hours.

How much we come short of training our pupils and children to the very best position may be known by putting a company of fairly formed but undrilled men in line for military service, and it will be known all the better if we have at hand a company of well drilled men with which to compare them.

How much we habitually fail of perfection in motion I learned when I contrasted the somewhat lingering movement of a body of men who, I thought, marched pretty well with the true, elastic step of the cadets from Orchard Lake.

Through all military life and intercourse runs the spirit of subordination and formal courtesy, and I hardly know of two other duties which need enforcement in our day so much as these.

The duty of prompt, unquestioning and absolute obedience was once stoutly enjoined upon the young. It is said to be much out of fashion of late; bnt when this virtue flees from the home and from the school it will find its impregnable citadel in military life.

If this language seems to imply a more gloomy foreboding than the facts justify, it is at least true that military discipline gives most wholesome and needed lessons in obedience to law—to all law, and to constituted authority, and in courtesy, too. They say that, also, is disappearing, to our detriment. However that may be, it is safe to say that the heedless youngster who has been taught to make it a matter of pride and of principle to salute his superior officer when he meets him, and before addressing him, and when he leaves him, and to address him with certain titles and forms of ceremony, has acquired not a complete education in courteous deportment but the rudiments of one, and that he is thereby better prepared to note and heed whatever other forms of respect regulate and smooth the intercourse of men. In the course here proposed we meet and deal with these boys as we would with men, and this rule is sound in general. To make a boy manly treat him like a man.

It is also fair to claim that the familiarity acquired by our pupils with military movements and principles will quicken their interest in a large part of history and literature, and make it possible for them to get clearer views and form truer judgments concerning many subjects than they would otherwise do. Thus gain would accrue to the school.

Finally, we hold these statements to be true: That it is the proper office of the schools to furnish, so far as it can be done, all kinds of knowledge which will give their pupils vantage ground in entering upon the pursuits which will occupy them when their school life is ended. That much the smaller part of these will, of their own choice, lead studious and retired lives. That the larger part, stirred by ambition, will take their course through the thick ranks of men, through stirring scenes, seeking to know their fellows and to be widely known by them. That the training which we advocate would introduce the young man on advantageous terms to a large class of active men who do and will interest themselves in military affairs. And we therefore hold that our schools are only performing their proper office when they use all available means to afford this knowledge to those who attend them.

Now I am fully aware of the incompleteness of this discussion, but hope this may serve to call attention to a theme new to these meetings, so far as I know, but one which I hope will have fuller consideration hereafter. Meantime if there is any truth in the views here set forth, I may safely ask you who love your country and would protect it from all dangers, you who hate war and would put the possibility of it far off, you who employ your thought in promoting the most complete development of the youth of this fair realm, and you who plan for the future safety and glory of this good State of Michigan, to think on these things.

DISCUSSION OF MR. WHITE'S PAPER.

Col. J. Sumner Rogers said:

I fear I shall not be able to add very much to the interesting paper just read. Some facts, however, that have come under my observation during the twelve years that I have devoted to this special work may be of interest.

In support of the direct advantages claimed for the military exercises in the building up of a strong physique in the boy of average health, I would say that upon this point we have at Orchard Lake made repeated tests, and find that after three months of the regular exercise that we furnish our cadets and the regular habits that we enforce, our boys have made an average gain of five pounds of good, healthy flesh. Some have gained as high as fifteen pounds during this period.

And not only is there a gain in flesh, but the complexion becomes clear, the eye bright and the step elastic. We have had many frail boys sent us with feeble constitutions, who were unable at first to take the regular exercise, but they gradually improved until they were really made over into strong, healthy lads.

Were the military exercises of no other use than in preserving the health of the students, and in confirming in them good figures and manliness of deportment, are not these ample reasons for introducing the military drill into schools generally?

In my judgment these advantages can, in a modified form, be secured for every scholar in the State. The setting up exercises, as we call them (a form of light gymnastics which bring every muscle of the body into play) could be practiced in our schools without any perceptible loss of time. The teachers could, with a few hours' study, make themselves familiar with the drill, so that they could at a stated hour of the day, practice their pupils in this drill for twenty or thirty minutes with very great advantage. During these exercises I would throw all of the windows of the schoolroom wide open, and let in the fresh, pure air. The girls, as well as the boys, could take part in these exercises, and with equal profit.

We all know that they who most need physical exercise do not take it voluntarily, hence the importance of making it one of the regular exercises of the school.

In our high schools why not adopt the course so successfully followed by the Boston High Schools for many years? There, every boy over eleven years of age is drilled two or three hours each week in the school of the soldier, company and battalion. Most excellent drill halls are provided, a drill master employed, and the city has purchased arms and accoutrements for their use, expending recently over $10,000 for that purpose. All the lads wear a military cap, with monogram as an ornament, indicating the name of the school to which they belong. This results in establishing an *esprit du corps*, which is of much advantage, in fact necessary to the success of any organization.

While in Boston recently, I called upon Mr. Merrill, the head master of the Boston Latin School, and in reply to my enquiries he spoke in the strongest terms of the advantages of the military drill. He said that the boys were more subordinate in the class room, more gentlemanly in their deportment, and the prospect of an office as a reward of merit proved a great incentive to excellent work in the class room. He informed me that the drill was very popular with the boys; their natural fondness for it made it a pleasant recreation; although a part of their tasks, it became one of their pleasures, and that the teachers were unanimous in their support of it.

I also saw the head master of the English High School, where they have nearly seven hundred cadets, and he was enthusiastic in his support of the military drill, and informed me that for no consideration would he consent to its abolishment.

The officers of the corps are selected from the senior classes, and support the authorities in the maintenance of school discipline, in the same manner that the Sixth Form at Rugby coöperated with Dr. Arnold; and with equally good results.

I witnessed the drill of over three hundred of these cadets, and noted the order and gentlemanly deportment of the boys while in the hall before they were called to attention. No appearance of roughness or unseemly conduct was observed. I also watched them while upon the streets going to and from school, and their deportment was that of the well-bred gentleman. I am convinced that the military cap which they wore had much to do in bringing about this desirable result.

One of the important lessons military discipline teaches, is the necessity of recognizing rightful authority in all the relations of life. It must be admitted that our American boys do not seem to readily comprehend the word subordination. Upon this I will quote from a letter written to me by the late General Barry of the army. He says:

"The weak, capricious, and partial enforcement of many municipal, State and Federal laws; the apparent decadence and neglect of parental or home discipline, and the pervading absence of unquestioning deference for and obedience to duly constituted authority and its legal and necessary enactments and execution, are pregnant with the gravest dangers to the well-being and perpetuity of our form of government. I believe the principles of military discipline, judiciously illustrated and taught, and so deeply impressed upon the receptive and pliant mind of youth as to become a habit of life, will prove to be a most reliable corrective of these evils. It must, of course, be understood, that such teachings are not to be of the school of the martinet; but while an unreserved obedience to law and courteous respect for those who are appointed to execute it are insisted upon, the entire subordination of the military to the civil law must never be lost sight of."

I am informed that in the republic of Switzerland, all of the boys in the school grades that correspond to our high schools, are organized into military corps, and are provided by Government with special military instructors and furnished with arms. The uniforms of these cadets is a modest stripe and one or two bright buttons, which cost almost nothing, but give the wearer a soldierly pride and love of corps. It is said that the practical working of this system is admirable.

The effect that the military drill proposed for our schools would have upon the future of our country and the National welfare is certainly an important question to be considered. The constitution of the United States makes every able-bodied American citizen from 18 to 45 years of age liable to be called upon for the discharge of military duty,—he is a citizen soldier and should be equally prepared by education to discharge his duties in either capacity.

Rendering mankind ignorant of the arts of war will never insure absolute security, but on the contrary, if we would escape war we should at all times be prepared for it. Soldiers fully appreciate the fearful cost of war, and never resort to it until after all other honorable means have failed.

We might add that military education is necessary for the legislator; is of great use to the traveler, and is absolutely essential to the student of history, as has so well been demonstrated by Prof. White.

THE PERSONALITY OF THE TEACHER.

BY MRS. A. M. GARRIGUES, INSTRUCTOR IN ENGLISH LITERATURE AND ELOCUTION, ANN ARBOR HIGH SCHOOL.

Some one has said, "It is not what a man has acquired, but what he gives out that determines his value."

It is interesting to consider how this fact of personality enters into the web and woof of life. If the habits of one generation are to become the instincts of another; if these habits are measurably the result of impulse, and if impulse has its origin in contact with older and stronger lives, the subject becomes so vast that we must limit our view in order to realize any portion of it.

That some persons do possess a strong magnetic force, or an influence over other lives that may be a greater power for good than can any sum of acquired knowledge, is a fact beyond question. But this thought in its relation to the teacher's profession has suffered from a vague, and I have sometimes thought, insincere treatment. I am not very familiar with the proceedings of the recent school conventions; but those of an earlier day had not proved their right to exist until they had voiced some sentiment about the blank paper character of the young mind, and had made an effort to impress upon the teacher a sense of his power to write thereon whatsoever he would.

Now, I have never found in life anything which precisely corresponds to this blank paper figure. I have seen on the contrary much to convince me that many of the young minds, richly deserving of our consideration, are figured by something very different from white paper. Unquestionable traces of heredity, often large measures of original endowment, and not less often a trace of what the Fathers were wont to term "original sin." All these I have found, but no blank paper.

If the personality of the teacher has a definite relation to his work, let us try to bring it out of the region of vague speculation, hyperbole or sentimentalism, and place it in the focus of practical common sense.

It is not my purpose to seek the origin or philosophy of those traits that make one a power for either good or evil, but rather to designate some points by which this power may be recognized when accompanied by high moral purpose.

I believe the first characteristic to be sincerity. There are men and women not wise, in the sense in which we use the word, not broad in their views, nor strictly logical in their reasoning; we should not seek them out when we discuss the deep problems of life; yet they are strong because they are true. There is shining through all their acts a certain loyalty to truth that dignifies and ennobles the most trivial aspects of daily life.

A second indication of the presence of this power is a high ideal of the purpose of life. It is this abiding faith in the high destiny of mankind that leads the teacher to see in every aspiration a thread by which he may lead from emotion to principle; and which sees in every evil tendency a hindrance to true development. It is to this uplifted and unswerving aim that we must refer the exceptional achievements of the great master at Rugby:

> "It was not so much," writes Mr. Price, "enthusiastic admiration for Mr. Arnold's genius, learning, and eloquence, that stirred within us, as it was a sympathetic thrill caught from a spirit that was earnestly at work in the world, and at work to achieve the fulfillment of the highest purposes."

The presence of this characteristic assures us of another; if life has great possibilities for me it has also much for my brother. One sun shines for all; one life animates all. This belief in the brotherhood of the race becomes the fountain head of sympathy, and furnishes its possessor with a key to all hearts; and he who carries this passport has at least one of the cardinal qualifications of the teacher. He may err in judgment, may fail at first in minor essentials, but with enthusiastic and even moderate will power this purity of purpose and quickness of sympathy will lead him eventually into true if not broad usefulness.

Admitting the force of a strong personality in the teacher, what is its province? What have we a right to expect from it? Is that parent right or wrong who laments the good old times when the individuality of the master was so much; and the drill of which he now so constantly hears, so little? As I consider this question there arises in my mind the memory of a schoolroom that is no longer in existence. The modern school board has built a modern four-story high school on the very ground. I remember, I regret to say, but little of the lore gathered from text books in that room. I think there was something corresponding to modern search for "snaps," and the modern evasion of hard work. I believe the chief problem then as now was to get the largest results (in recitation) for the least expenditure of force. But when our lessons for the day had ended, before we dispersed to our homes, we turned about on our old-fashioned seats to listen to a few general remarks from our teacher.

Often, at this hour, some event, either in the school or community, which had been of sufficient importance to arrest attention, or possibly to arouse emotion, was made the theme of discussion. We were encouraged to ask questions, and to express, in brief, courteous words, our views. We were led to see how feeling should be the germ of principle; how undisciplined emotion is worse than useless. With the utmost delicacy suggestions were made regarding our relations with each other and, (our teacher was a firm advocate of co-education), also with our friends of the opposite sex. We gained the spirit of inquiry into the meaning of conventional forms, and learned to seek and often to find in them a reflection of the higher law of preferring one another.

As I have said, I recall but little of the text book work of those days, but life will not be long enough for me to lose the impressions made by those quiet talks. I had then no experience by which to measure the proportions of my teacher's character. Later years have furnished that for me, as coming years will certainly do for the boys and girls of to-day. Whenever life has presented tests requiring special consideration, whenever emergencies have arisen in which sudden judgment was demanded, with lightning swiftness, I have recalled the personality of my one true, wise teacher, my one grand ideal representative woman, and as the utterance of these words again brings her stately presence and impressive figure, before my mind's eye, it seems not unfitting that in any convention of teachers in this State, in this city, I should speak the name of a woman, who in a day when such advocacy was yet unpopular did more by word and deed in the interests of woman's development, and for her liberal education than has any other person in our State; and so I speak with profoundest respect and warmest affection the name of Miss Abigail C. Rogers. As I have said whenever in my earlier experiences I confronted one of the problems in life, my first thought was, not what would she have said, or what would she have advised (she did not enfeeble us with dogmatism), but how would she under like circumstances have found her way through the labyrinth?

What other result of school training can, for a moment, compare in importance with this one? What text book work or class drill held such close and vital relation to the conduct of life as did my contact with the strong and fine personality of this woman who sat

"'Full summed in all her powers,
Dispensing harvest, sowing the 'To-be.'"

The age which represents the transitional period from childhood to youth, is one full of possibilities. Can we not remember how within the sweep of ordinary mental development, a new world of thought and emotion at this time dawned upon us? How our crude mental fingers went groping in the confusion around us in search of new reasons for being or doing? This is a common experience. We can utilize it in the school-room by simply remembering that it is such; that where once all was darkness and confusion to us, it is now such to our pupils; that where we have stumbled, *they* may stumble, where we have sought and found a friendly, guiding hand, they would gladly do the same.

It is well to have an abiding consciousness of the fact that in every young mind in varying degrees of activity or sluggishness exists this question of questions regarding life. "What does it mean? What is my relation to, and how shall I take hold of it?"

Nowhere else is life more intense than in the school-room. In no other place is human nature more human than there. And hence in no other place will the assisting hand be more eagerly sought, or, when rightly extended, more gratefully accepted than here.

A pupil blunders in recitation or possibly by an awkward movement calls upon himself the attention of the class. There is a rude laugh; the teacher will restore order as quickly as possible, but the incident will prove the theme of a future discussion in which the class may share. In this talk he will try to bring out the thought that a fine consideration of the feelings of others will lead us to suppress all that would call attention to them at such a time.

"If," questions the the teacher, "one of your number should fall into the fire, what would you do?" The answer is prompt and emphatic: "We would run to his rescue!"

"If James, here, should trip over that seat and hurt himself, just a little, what would you do? would you laugh?" "Yes and no." "Why 'yes,' and why 'no?'" "Should the ubiquitous bad boy remove his seat as Charles is about to sit down, would you laugh?" "Yes!" "And under similar circumstances should you enjoy being the subject of such mirth?" Is it ever wholly pleasant to find yourself the center of attention when these minor misfortunes befall you? Why are we less careful of the feelings of our friends than for their bodily sufferings? That you would run to their aid when danger threatens proves the real kindness of the human heart. Right here we find the real bond between man and man. This regard for the welfare of others lies at the root of civilization. To its development we owe all that is worth the name of social life, and only when we extend it to a consideration of mental and moral conditions, does our civilization deserve its name.

"Now how will you, in instances like the present one, guard the feelings of a friend? Simply by not seeing, or by seeming not to see, his discomfiture. Many of the rulings of our social code have their root in this simple law of kindness, and in fulfilling them we give visible rendering to the law which bids us love our neighbor as ourselves. "Like mercy, these gentle considerations are twice blessed. In the breast of him who observes them they lead to self-mastery, to a subjection of the baser being and the development of the nobler nature; and truly, on the recipient, their soothing influence 'droppeth like the gentle rain from heaven upon the place beneath.' We may also say of this priceless attainment, 'Tis mightiest *in* the mightiest."

I have known talks of this kind to lead to questions that I could not answer. Certainly I have; but I never feel more certain that I am treading the border-land of success than when I have aroused this questioning spirit. I have also known them to result in an honest study of the principles which underlie our social code; and if it is the aim of the teacher to place at all times the light of understanding behind the screen of dead forms, to show the relation between law and life, between evil and its consequence, to awaken impulse, to communicate quickening power to dormant energies, then this result is not one to be regretted.

"But where," you ask, "are we to find time or opportunity for this work?" It is lamentably true that in many schools this does not now exist. Drill and formal recitation are regarded as the *summum bonum* of all effort. But I can not think that the true teacher will content himself with this state of affairs. If he has a strong personality he will find a way or make a way.

The difficulties, particularly in those schools which hold but one session a day with only brief intervals for the change of classes, are often very great. But that school is hardly worthy of the name that does not present some opportunities for the cultivation of personal relations between teacher and pupil. If no better arrangement can be made, one recitation per week might be dropped and the time given to conversation. In a mixed school it will be found advisable to arrange these for either sex alone. Words can in this way be spoken with greater significance and more freedom than under other circumstances.

The emotional nature is at this time in a state of effervesence. New power is awakening. New ambitions are developing and a sudden intensity often marks this period and makes the judicious management of the pupil still more perplexing. From this chaotic state may follow either that subjection of the emotional nature that is the basis of a pure and noble family life or that revolt which precedes surrender and the death of all that makes life worth living.

I can not speak on this topic without deep feeling. In every school there are boys and girls from ill-regulated homes; homes where moral training is wholly ignored, and in every school there are boys and girls who go astray. Now, at this point, we are led to acknowledge the value of a newly developed capacity for human attachment. It is Geo. McDonald who says that to know one person who is positively to be trusted, will do more for a man's moral nature,—yes, for his spiritual nature—than all the sermons he has ever heard or can hear. I believe we shall say he is right. If we can avail ourselves of this key, if we are swift to enter this "side door" of personal friendship, the situation with all of its wonderful possibilities is ours.

I do not wish to magnify the responsibility of the teacher beyond all reasonable proportions, but simply to say the relation with his pupil should at least be such that if any would approach him they may do so without fear of repulse. Until this confidence exists nothing can be accomplished. That much good may be the result of such a relation I have the best reason to believe.

I never knew a girl, or any number of girls, so wayward that they would not listen with interest to, and even share in a discussion of the elements of true womanliness. I never knew a boy,—and I have known a goodly number and variety,—who would not warm with interest amounting to enthusiasm to any exposition, within his comprehension, of the spirit of genuine chivalry, or who did not feel stirring within him some ambition to be a gentleman when the real meaning of the word was made clear to his consciousness.

We are told by those who have a right to criticize us that our great national necessity is,—not shrewdness, not energy, not ambition, nor even genius, but character, moral stability, power to do the good thing we should do rather than the smart thing we wish to do. We must admit the force of this criticism when we look around us and take note of the many lives whose energies are wasted because men and women have not been taught the value of a high purpose. They have toiled for things which do not pay, or from the lack of a guiding or controlling purpose they have been simply the victims of circumstance.

Nothing less than a zeal, not fitful but abiding, can tide the young life over monotony of dead-weight duties or help him to a constant discrimination between prominence and excellence.

Again let me say, that more than all else does the student wish to learn of life. To him it is an ocean unexplored, but "Every sail on the horizon is enchanted save that of the ship on which he sails." Around your craft which has left the harbor and is now well out to sea, there lingers an enchantment which only the memory of your own youth can interpret. Whatever you give him from your own life he will seize with eagerness.

Why do we press forward to take the hand of one who has greatly blessed the world by either word or deed? Why did the "Twelve" follow so closely the steps of the Master whom they loved? Why did the one who is, in touching language called "The Beloved" seek ever his accustomed place nearest the Master? It was, believe me, the attraction of this greatest of all personalities.

It is this, which has ever been and will continue to be the avenue through which the real treasures of life will come to us; and through us, will most effectively reach those whom we wish to aid.

It was this fullness and positiveness of being in its divine completeness, that led the Great Master to say, "I AM THE LIFE!" and it was through this power that He promised to draw all men unto Him. It is to-day, this same fullness and positiveness of being which is to regenerate the world, and which, wherever it exists, *is* regenerating the world.

"It is more powerful than speech; than instruction; than art. They are secondary; these are primary. They are effects; these are causes. They are limited; transient; these unending, enduring. Speech, art, instruction are fixed, finite things; life spreads, propagates, is plastic, changing with changing exigencies."

If you possess this divine gift, for it is of divine origin, cherish it sacredly and spread it freely, If you lack it seek it promptly, persistently. "How? Where?" do you ask? By an adjustment of your life to its law, wherein alone it can find development or freedom.

Have you seen a boatman rowing against the current of a broad, swift stream? If you have, you have said: "How futile to contend thus with a power so immeasureably greater than his own!" Have you seen him, becoming aware of the hopelessness of his labor, try to gain new power by rowing up stream with one hand and down with the other? If you have you have seen what fitly symbolizes the usefulness of a life at war with law and with itself. Its strength is weakness.

When the boatman turns his prow oceanward he finds the everlasting forces of nature bearing him on. He has now "hitched his wagon to the stars" and the gods are become his servants.

We have recently learned how, when man works parallel with nature's law, the hand of an infant can set in motion a power that can literally remove mountains. This is not less true in the moral world. When we are working in the direction of law, we can say unto the mountain: "Remove hence to yonder place; and it shall remove and nothing shall be impossible to us."

It is true that the sun furnishes his vast store of light and heat for the humblest plant that grows, and that it has but to receive that light to become strong and vigorous. It is also true that there is a vast reservoir of moral strength awaiting him who seeks it. But it can never be found by the man whose design is to use it for selfish purposes. The plant which seeks to withdraw from its fellows, in doing so shuts out the light of heaven, and speedily dies. Law is inexorable.

That teacher who is petty, arbitrary, unjust or cold, is so simply because he is selfish. He is not living. He has not learned the first lesson of life. His soul is paralyzed; it has never thrilled with the sublime thought of the brotherhood of humanity. He is still rowing hopelessly against the stream, or is whirling in useless circles; in either case making no headway. His strength is indeed weakness; he cannot have joy in his work. It is ignoble, pitiable slavery.

If he would be no longer a slave; if he would be free, if he would be king over broader domain than ever monarch ruled, let him learn to recognize the true glory of existence; know the infinite possibilities stored in one young life. Let him glow in the thought of what he may be to that unfolding mind, and he will realize that the proportion between his loving labor and its result is but faintly typified by the rocks at Hell-gate which scattered at the touch of a childish hand and left free channel for the passage of mighty vessels.

If we are true, if we are noble, if we are unselfish, we are strong with a strength greater than our own; and if we make ourselves fit avenues for the distribution of this mighty force we have learned what constitutes the personality of the teacher.

If the sentiments which I have offered were addressed to an audience of school trustees, rather than school teachers, I doubt not that the honest member who should think them worthy of criticism would open his remarks by saying: "Madame, you have told us nothing new; we have admitted and acted on the law you have discussed, and all things else being equal we always engage the teacher who possesses in the highest degree the characteristics you have named."

Now at the risk of having my topic on the programme changed from "Ethics of the School," to "Ethics of the School Board," I wish to call your attention to the significance of this little qualifying phrase, "all else being equal."

There is in this State a teacher in the first grade of one of our own excellent schools, who has gained among the thoughtful patrons of the school, distinction for her strong, fine personal influence. Her school-room is one of the most attractive that can be imagined, and it is the unreckoned expenditure of the teacher's vitality that makes it so. The sterling qualities and rare gifts of this lady have become so well known that parents have learned to confide their children to her care with grateful pleasure, and are only sorry when in the ordinary course of promotion they are told to "move on."

She has taught in this one school and in this same room, with unvarying success and satisfaction, for sixteen years. Her work is her life-work. Into it she has put with loving enthusiasm what in most lives is represented by the words: home, husband, children, wealth, fame, glory. She is no longer young; she will soon be old. She receives this year of our Lord 1885, the sum of $375 for her services, and if she should venture to ask for more the prompt and business-like reply would be: "We can fill your position twenty times a day with fresh graduates from the high-school, for $374.50, but *all things else being equal,* we prefer to keep you."

Now if strength, speed and style, are telling qualities in the horse and are recognized as such by the shrewd gentlemen of the turf, may we not hope that the time will come—in some stage of evolution—when the qualifications we have considered to-day may be reckoned as marketable qualities by the average member of the average school board.

I do not offer apology for an apparent divergence from my subject, for not until it is brought into the domain of ethical consideration will this subject receive the attention it deserves.

In no other profession is the distinction between the equal labor of man and woman so broad as in that of the teacher. We are told rightly enough that this is regulated by the law of supply and demand. We can understand that if one man and twelve women seek one position, the necessities of the woman may lead her to underbid the man, and also her sister women. But if among the twelve there should be found one who possesses some qualifications superior to those of all other candidates, it seems clearly right that her ability should be recognized in a more substantial way than a mere preference, "all things else being equal."

DISCUSSION OF THE PRECEDING PAPER.

Supt. G. W. Gillette, said:

I heartily endorse, in general, the sentiments of the paper just read and hesitate to enter upon a discussion which may mar, rather than increase, its effects. To say the least, I feel highly incompetent to discuss a theme so vast and complicated, and yet I believe it to be a duty which no true teacher will shirk.

Moral instruction has not kept pace with intellectual instruction in our schools for the reason that it has not of late years been regarded by many as coming within the school curriculum, and from the fact that it is more difficult to impart. The best efforts that have been made to arouse teachers to a sense of their duty in this department of instruction, seem to be grounded in that relationship which exists between true authority and rational liberty. Viewed in the light of reason there is little or no conflict between the two. No doubt there is too much mediæval authority both in our courses of instruction and in our discipline, and not enough of that which appeals directly to the moral instincts, conscience and reason of those instructed. Just where to draw the line between the *how* and the *why* in instruction is as yet undetermined, and will be so long as educators are unable to appreciate fully and in detail just what function liberty in the school is entitled to perform.

Rational liberty in the pupil does not mean that he shall be free from restraint. nor does it imply familiarity. I like these words of the paper just read, referring to the true teacher, "if any would approach him, they can do so without fear of repulse." I have known teachers whose intercourse with their pupils invited so much familiarity that it ceased to be refining or elevating. It is difficult to define true dignity; it never deals in over-indulgence of itself or others. Like Ruskin's true modesty, "she never contemns herself, or is ashamed of herself, but forgets herself, at least, until she has done something worth memory."

It is doubtless true that the moral sense of pupils is often perverted by the arbitrariness of the teacher. The child is often led to regard an action as morally wrong which is in itself perfectly innocent; and yet there is such a thing as the right kind of arbitrariness. It finds expression throughout life. There are many things we cannot explain even to older pupils. Such things must be taken on faith, and, if the pupil has respect for his teacher, he will, by accepting and acting on these truths, acquire moral habits. True authority is therefore grounded in respect, an authority upon which much of the right habits of young children, before they have what may be called conscience or reason, must therefore depend. Neither does true authority exclude fear. No law, civil, natural or divine can exclude fear. The child must burn its fingers, the bad man must break the law of the land and most people must break some divine law, before they will entirely understand these laws. Conceited, obstinate children must often be made to feel the results of their disobedience or stupidity before they can be held up to any high course of moral conduct. Not that fear itself inculcates moral feeling, but that it leads to habits of right conduct by a constant avoidance of the wrong. True authority includes justice, which has been defined as "the righteous bestowal of favor and of indignation." It does not attempt to explain the inexplicable, teaches by example rather than precept; but teaches by precept when necessary. It always commands a healthy deference.

The school itself is a moral instructor. Its discipline is constantly appealing to motives of right and wrong and constantly inspiring, with its multiplicity of lessons, habits of virtue, honesty and temperance. Some studies of the curriculum more than others tend to refine and elevate the mind of the student. Literature inspires with its examples of heroic action and noble deeds, its refined and pure language. Science, by its constant invitation to truthful observation and conclusion leads to true pride, self-reliance and independence of thought; and by its continual verging upon the unseen and enduring teaches a true humility in the realization of the littleness of human intelligence.

This leads me to a point which I wish to emphasize, viz: That the cry of practicality, the plea of those who would confine the instruction in our schools to that which will fit children for earning a livelihood merely, is tending to increase the number who go out without habits which will tide them over the dangers of leisure in after life. Hundreds of young business men are to-day finding their pleasure in questionable amusement simply because they never formed these habits while in school. Give a young man the habit of taking pleasure in a study which has an elevating and refining influence and he has an anchor both sure and steadfast which, in the voyage of life, will bind him with bands of steel to the good, the true and the noble, and withhold him from the dangerous rocks of many a vice.

I have my doubts about setting apart a time for moral instruction in our schools. This, it seems to me, would be taking back tracks. We have grown out of much of the form and precept of the past, and anything which looks to a return to such methods and which, in the hands of inexperienced teachers, would easily become formal, should be avoided. If I go to my class with the idea in my mind that at a certain time I will reveal to them an elevating thought upon a particular subject, my instruction will not have that personal inspiration, spontaneity and disinterestedness necessary to make it most effective. If I go to my class with the right spirit, opportunity will not be wanting for moral inspiration; and, when it does come, it will be accompanied by that freshness and force which will carry conviction to all in my presence. If the lessons are given at a fixed time, inappreciative pupils will soon learn that this is a good time to be absent or tardy; and, moreover, there will not be that opportunity for constant iteration and variety of instruction which the variety of common lessons always offers.

Again, I believe that much of the work in our schools which strives to make education easy tends to debase rather than elevate. Strength of character comes largely by exercise in those things which are distasteful. There is no virtue in that which has not its opposite vice. A student who has not passed through an agony of effort, mental or moral, is not strong. If in my development work by questions or otherwise I suggest all that there is in the lesson, I leave nothing for the independent, spontaneous action of the pupil's mind to accomplish. They are, therefore, deprived of the strengthening exercise of their own thoughts.

Again, I believe that the indiscriminate and unrestrained exercise of the playground has no physical substitute in the school; but the evil which comes from mingling with bad associates, with the damaging excesses of the excitement of play, when animosities are so easily aroused, especially when there is not the guiding or ameliorating influence of the teacher present, is unquestionable.

I will mention only one more obstruction to moral instruction in our schools, and that is the present tenure of office of the teacher. It takes men to mould men, but it takes time even then. The full, free exercise of one's influence over others comes only in years. The teacher who would exert the greatest good must belong to a school long enough to come into intimate relationship with parents. We do best for those we love and respect. Note the effect for good or evil of the long-continued relations of parent nd child. Then, too, does the power of pupils over one another receive its highest adjustment. Frequent change in teachers begets a love of novelty, and pupils become bolder to evil when they think that they may be the means of the retirement of those to whom they do not take a fancy.

Supt. George Barnes said :

One point in connection with this subject that does not seem to have been brought out in the paper should, I think, be emphasized.

An idea prevails among many teachers of the State that moral training is not a part of the work in the public schools, that by some mysterious law or custom the State rather forbids such training. This is a fundamental error in understanding the spirit and aim of our school system, and we as school-men should use every opportunity to correct it.

If the State has any well defined object in providing for the education of its sons and daughters, it certainly is to make better men and women, more law-abiding citizens.

The teacher who loves his fine Havana, or clings to some other habit that he does not care to have his pupils imitate, excuses himself behind the plea that moral training belongs to the Sunday school and the denominational college, but is no part of his work.

If we get the right idea of popular education we must conclude, I think,

First. That the public school has the right to provide for the moral instruction of its pupils. In accordance with no other theory has the State the right to take your money and my money to educate the children of some one else.

Second. That the teacher who would be true to his calling cannot conscientiously neglect this work.

THE "BLAIR EDUCATIONAL BILL."

REPORT OF THE SPECIAL COMMITTEE APPOINTED TO CONSIDER.

Mr. President:

The "Blair Educational Bill" which passed through the Senate of the United States on the 7th day of April, 1884, by a vote of 33 yeas to 11 nays, provides for the disbursement to the several States of this Union during a period of eight years, in aid of common schools, the sum of $77,000,000, said disbursement to be made on the basis of illiteracy, each state to receive such a proportion of this sum as the whole number of illiterates over ten years of age bears to the entire number of illiterates in the United States. According to the census of 1880, out of a population of 50,155,783 there were 6,340,558 persons over ten years of age that could not write, or one-eighth of our entire population. Of this illiterate class 1,442,064 resided in the North, and 4,804,528 resided in the South. Thus it appears the percentage of illiteracy in the South is nine times as large as in the North.

The percentage of illiterate white males over twenty-one years old, and therefore voters, in the United States, is 7.8 per cent., and of the colored 68.7, giving us about 2,000,000 voters who cannot even write their names. Something over one-half of this large number of persons—about 1,100,000—belong to the colored population.

The bill provides that an amount not exceeding ten per cent. may be used for the education of teachers; also that no part of the appropriation can be expended on the erection or repairs of school-houses.

It will be borne in mind that the appropriations contained in the bill are not made to the several states unconditionally, but are conditioned upon proof being furnished of a certain amount of state aid being rendered the common schools in each commonwealth, and that said schools shall be free, and in the application of the funds no distinction of race or color.

Your committee favor the purpose and general provisions of the bill for many reasons. Ignorance is the mother of vice and crime. The proportion of criminals among the illiterates, upon the lowest calculation, is ten times greater than among those who possess an ordinary common school education. The diffusion of the benefits coming from our public schools will have a decided influence in behalf of morality, will make the rights of property more sacred, and supply protection to the person of every citizen. It will add to the sum of industry of the people, and hence result in the accumulation of capital. It will also make the labor of the industrious more valuable, for the pecuniary value of the labor of those who have not received an education above that obtainable in the common school even, is many per cent. greater than the labor of those who are wholly illiterate.

This subject is of special interest to us as citizens of this great country because intelligence and virtue are essential to the perpetuation of the institutions of a free government, and the virtue of the people is found to rest practically very largely on their intelligence. A nation constituted like our own, with State governments as well as a National government—some of these States containing a population of which more than fifty per cent. are illiterate—a nation, too, in which universal suffrage exists, cannot afford to withhold the most liberal provision for common school education.

It is no time now to talk of the responsibility for this alarming illiteracy in certain portions of our country; the only practical question before us is that which relates to the removal of the sad ignorance which now prevails, so that they who are invested with political power may know how to use it wisely. Every eighth man in this land cannot write his name, and in some sections of our country this is true of every second man.

We shall never have another war waged because of the demands of slavery, but the ignorant classes in our cities, and out of these cities, constitute a dangerous factor of the social and political life of the people. With universal suffrage, less than universal intelligence leaves us weak where weakness is a political crime.

As the Southern States would obtain the greater part of the sum proposed to be appropriated, it is in place here to say that unless something shall be done for them the people of the South must wait many years before they can provide for themselves anything like the general appliances of education we at the North possess. Not only must teachers be paid for their services, but largely they must be educated also; school-houses must be erected, necessary apparatus procured, with special difficulties in the way growing out of the presence of different races which are largely out of sympathy with each other. The people of the South are yet poor. The fact that the war of rebellion was a stupendous folly does not make the fact of their poverty any the less a fact, and their need of help any the less real. We trust that in the future the words North and South will come more and more to have a less intense sectional meaning. We ought to be one people, and we shall gradually grow to be one people. This desirable end can be fully realized only as we shall become educated very nearly up to the same plane. There must be a oneness of civilization in every meaning of that word. To the common school more than to anything else must we look for the achievement of this result. We therefore submit the following resolution for adoption:

Resolved, That as the Teachers' Association of the State of Michigan we endorse the provisions of the Blair Educational Bill, and respectfully urge its passage.

L. R. FISKE,
Chairman.

REPORT OF STATE READING CIRCLE COMMITTEE.

To the State Teachers' Association:

At your last annual meeting the following resolution was offered and adopted:

Resolved, That, in view of the need of a more systematic study of the theory and science of education, the President of this Association appoint a committee of three to devise and report a scheme for "Teachers' Reading Circles," the committee to report to the next Teachers' Institute; and if the scheme shall meet the approval of that Institute, that the Superintendent of Public Instruction be asked to embody it in the next Institute Manual.

In accordance with this resolution, the President appointed the undersigned as a committee to carry its provisions into effect. Owing to a misunderstanding as to the chairmanship of the committee, our first meeting did not occur until March 21, 1885. At this meeting, after the organization of the committee, the following recommendations were adopted:

1. We recommend that at the next meeting of the State Teachers' Association there be elected a State Council of six members, two for the term of three years, two for the term of two years, and two for the term of one year; and that thereafter two members be elected at each annual meeting of the Association to fill the places of the two retiring members. This Council shall organize by the election of a president, a secretary and a treasurer; shall adopt by-laws for its own government, and shall have in charge the general management of the County Circles.

2. We recommend that County Boards be organized *at once* as follows: The Secretary of the County Board of Examiners shall be a member, *ex officio*, with four associates, who shall be appointed by the State Council from a list of six candidates recommended by the Board of Examiners. Two of these associates shall hold office for a term of two years; and two for a term of one year; after the first appointment two members shall be appointed each year to fill the places of the two retiring members. The organization shall be the same as that of the State Council and shall be the medium of communication between the State Council and the members of the State Circle.

3. In cases when there is no county organization, individuals may apply for membership to the Board of an adjoining county, but this relation shall cease whenever the county organization is effected. In certain cases two or more counties may unite for the organization of a joint Board.

Members of the State Circle at any point may form a Local Circle, subordinate to the County Circle.

4. The membership fee for the first year shall be twenty-five cents; and the sums thus derived shall be transmitted each month to the treasurer of the State Council, together with the names of the members whose fees are thus paid.

It will be observed that in addressing these recommendations directly to the teachers and school officers of the State, we exceeded our authority, as by the terms of the resolution we were merely to report a scheme to the next Teachers' Institute. We felt obliged to go beyond the letter of our instructions for the reason that teachers were waiting to begin a course of reading, and were looking to this committee for directions. We did not think it was the wish of this Association that a whole year should pass before the teachers of Michigan should begin a work which in neighboring States was well under way. Our policy has been to do what seemed really necessary to be done, but to do no more. We have not forgotten that our work was provisional, and we have tried to avoid any measures that might compromise the policy of our successors.

On April 18, 1885, this committee held another meeting, at which the following course of study was adopted:

FIRST YEAR.

1. Professional: Page's *Theory and Practice of Teaching.*
2. History: Barnes's *General History* to p. 312.
3. Literature: Swinton's *Studies in English Literature*, with supplementary reading.

SECOND YEAR.

1. Professional: Putnam's *Outlines of Theory and Art of Teaching.**
2. History: Barnes's *General History*, completed.
3. Literature: Swinton's *Studies in English Literature*, completed.

THIRD YEAR.

1. Professional: Bain's *Education as a Science.*
2. Psychology: Haven's *Mental Philosophy.*
3. History of Education: Browning's *History of Educational Theories.*†

Laurie's *Life of Comenius* is adopted as supplementary reading in any part of the course where there may be leisure for it.

(The following reference books are recommended to members of the Circle: A Dictionary; an Atlas of Ancient and Modern Geography; either the *Dictionary of Education and Instruction*, or *Cyclopædia of Education*, and *The Power and Authority of School Officers and Teachers*).

We employed our best efforts to secure the lowest possible rates for the books recommended in the above course, and the results are seen in the following table:

Name of Books.	Retail Price.	Price to Circles.
Barnes's General History	$2 00	$1 40
Browning's History of Educational Theories	75	50
Haven's Mental Philosophy	1 60	1 20
Laurie's Life of Comenius	1 00	70
Page's Theory and Practice of Teaching	1 25	90
Putnam's Theory and Art of Teaching	----	----
Swinton's Studies in English Literature	1 50	1 20
Bain's Education as a Science	1 75	1 20

---

*The other members of the Committee have assumed the responsibility of placing on the list Putnam's Outlines, etc., which will be published in a full and enlarged form at an early day.

†To be replaced by Compayré's History of Pedagogy as soon as published.

For the purpose of securing the greatest possible certainty and promptness in the supply of books, we established a State Depository in Lansing and placed it in charge of Mr. Wesley Emery. It was also decided that the County Board might retain one-fifth of the membership fees for the payment of local expenses.

It is thus seen that the following measures sum up the essential work of this Committee:

1. A recommendation for the organization of a State Council of six members.

2. A recommendation for the formation of County Boards of five members each.

3. A proposed Course of Study with certain text books.

4. The establishment of a State Depository in charge of a State agent.

These measures were communicated to the public through two Circulars of Information, copies of which accompany this report.

The accompanying reports of the Secretary, Treasurer, and General Agent, indicate what has been accomplished since May 1st in the organization of Reading Circles in this State, and in the work actually undertaken by teachers through this agency. In some counties where Boards have been organized no actual work has been done, so that the Report of the State Agent is a better indication of the work than is now actually in progress. It is but just to say that it was not till September first that the sale and distribution of books began in earnest.

From the Secretary's report it appears that applications for the appointment of a Board have been made from the following counties: *Allegan*, Alpena, Arenac, *Bay*, *Barry*, *Cass*, *Calhoun;* Clinton, Cheboygan, *Eaton*, Emmet, Gratiot, Houghton, *Ingham*, Ionia, *Jackson*, Kalkaska, *Kent*, *Livingston*, Leelanaw, Lapeer, *Macomb*, *Marquette*, Montmorency, Monroe, Ottawa, Otsego, Osceola, Oceana, Sanilac, *St. Joseph*, Saginaw, Tuscola, Wayne, Wexford.

The names italicised are of counties in which boards have actually been organized and the fact reported to this committee.

Organizations may have been made in other counties, but if so they have not been reported to us. We have thus made appointments, in thirty-five counties, but so far as we are able to report, boards have been organized in only twelve counties.

The Report of the State Agent shows that he has sold books as follows:

	Copies.
Barnes's General History	512
Page's Theory and Practice	350
Swinton's English Literature	400

The report of the Treasurer is as follows:

D. Putnam, Treasurer, in Account with Michigan Teachers' Reading Circle.

Moneys received :	
From Bay County Circle	$5 00
From Livingston County Circle	4 00
From Ingham County Circle	12 40
From Eaton County Circle	10 30
From Jackson County Circle	1 60
From Macomb County Circle	12 00
From Barry County Circle	5 40
Total	$50 70
Paid out :	
For printing, postage, etc.	$16 13
Balance in treasury	34 57

December 2, 1885.

To this statement of results it may be proper to add some observations on the motives which should be appealed to in order to make the Reading Circle productive of the possible good that is in it. The need of promoting a spirit of self improvement among teachers will be acknowledged by every one. Indeed, this is to-day the vital question in education. If the professional knowledge possessed by a few could be made the common property of all through reading and study, a general forward movement would be taken in the teaching art. This in itself is vastly important; but the infusion of the scholarly spirit into the great army of teachers is a consummation still more devoutly to be wished. We may, say, then, that one purpose of the Reading Circle is to give knowledge, and another, and even more important purpose, is to create and foster the scholarly spirit. At the point we have now reached in the history of this movement, it seems to us that the question of the greatest practical moment for the managers of this interest is this: To what motives shall we appeal in order that the great mass of our teachers may employ the Reading Circle as a means of self-help?

To those who have observed the temper of the teachers who attend the Institutes it must be apparent that they may be divided into three classes, somewhat as follows :

1. Those in whom the desire for self-improvement is clearly pronounced and who need merely to know in definite terms what course of reading and study they can pursue with profit. They have zeal enough to begin a proposed course and will-power enough to complete it. They need no artificial stimulants.

2. Those who feel a weaker desire for self-improvement, sufficient to start them on the way, but not sufficient to carry them through a course of study. They make a beginning, but fall out on the way. They need an artificial stimulus in the shape of some tangible advantage to hope for.

3. Those who have no desire for self-improvement, but who need to be roused from intellectual torpor. For all such cases the first need is some *vis a tergo* to initiate a forward movement, and then the hope of some tangible reward to sustain the movement.

We here leave out of account the natural motives, such as a high sense of duty, a steadfast zeal in personal improvement, a love of knowledge for its own sake; such motives as inspire the first and the smallest of the three classes noticed above. Our business is now with lower or artificial motives which must be contrived to help those whose taste for study has not yet been formed.

As it seems to us, these motives must be supplied by the County Examiners, and that one of them must be a hope, and the other a fear,—the hope of a reasonable credit for work done, as an aid in gaining a license, and the fear that the neglect to do this reasonable work may be a bar to the getting of a license.

In other words it seems to us that the question of whether the teacher of a given county enter upon the work of the Reading Circle depends almost wholly on the policy of the County Examiners. It is plain to us that at least one positive thing should be done,—the certificate for work done in the Reading Circle should in all cases be generously counted to the teacher's credit on the books of the Examiners. If the county examinations were to be made to bear on successive portions of the course of study prescribed for the Reading Circle, every teacher in the State would have a personal interest in this organization. If this policy were to be prudently followed, the future of the Reading Circle would be assured without a question.

As the result of our experience and reflection, we now offer for your consideration the following recommendations:

1. We advise that the general management of the Reading Circles of this State be vested in a State Council consisting of the Superintendent of Public Instruction, *ex officio,* and four members to be elected by this body, two at each annual meeting. Of the four members to be elected at this meeting two are to hold office for two years and two for one year. This State Council of five shall organize by the election of a President, a Secretary and a Treasurer, shall make all necessary laws and rules for carrying into effect the policy of this Association, and shall make an annual report to this body.

2. We advise the continuance of the present system of county organization, viz.: A board of five members, one of whom shall be the Secretary of the County Board of Examiners, the four other members in the first instance being appointed by the State Council from a list of six candidates nominated by the Secretary of the Board of Examiners, and after the first organization two new members to be appointed each year in the same manner as before. By this mode of county organization, the initiative must be taken by the Secretary of the County Board. We assume that he will feel a personal interest in the self-improvement of the teachers of his county, and will stimulate and encourage a general participation in the work of the Reading Circle. We know of no other way of bringing effective motives to bear on the teaching classes as a whole, to quicken and sustain among them a proper spirit of self improvement. If this officer is as wise and as dutiful as he may reasonably be presumed to be, he will make of the Reading Circle an instrument of incomparable value.

It may happen in the future as it has already happened in a few instances, that through indifference or hostility, the Secretary of the County Board will not take the initiative, even when he is urged to do so by the zealous teachers of his own county. In such cases a way of escape must be provided, and we recommend that whenever this officer neglects or refuses to nominate members for the County Board, any ten teachers of the county may petition the State Council for an organization.

3. We advise the continuance of the course of study now in progress and the use of the books before commended.

4. We recommend the systematic and accurate examination of teachers on the work of each year in the course, and the giving to each successful candidate of a certificate of proficiency. In case the work of the Reading Circle is generally extended, we foresee the need of an agent, presumably a member of the State Council, who shall be charged with the preparation of questions, the examination of papers, and perhaps with the general oversight of the County Circles. Such an agent would be the executive officer of the Council.

5. We think it necessary that circulars of information should be issued at regular intervals and sent to each member of the Reading Circle, such circulars to contain instructions and directions from the Council, notices of new educational books, and Reading Circle news in general. Perhaps a temporary arrangement might be made with the School Moderator for a quarterly issue or supplement, containing the matter which the Council wishes to communicate.

6. For defraying the necessary expenses of the general management, the membership fee must be increased to at least fifty cents.

7. We recommend the continuance of the State Depository in Lansing under the management of Mr. Emery. This mode of distribution is the best that we can devise, and Mr. Emery's agency has met our hearty approval in every respect.

8. We recommend the early preparation of a manual which shall contain an explicit statement of all the laws, rules, and regulations binding on the members and officers of this organization, and also detailed instructions for prosecuting the course of study.

The preparation of this manual will require considerable time, and a considerable sum will be necessary to print and distribute it.

Respectfully submitted,

W. H. Payne,
W. S. Perry,
D. Putnam,
Committee.

Ann Arbor, Dec. 24, 1885.

DISCUSSION.

Discussion was opened by Superintendent L. R. Halsey:

There is no need of argument concerning the desirability of forwarding the work of the Reading Circle. Every thinking teacher knows that, if properly carried on, the movement will lead to great advancement along all educational lines.

The time has come to act. The teachers of Michigan should show their appreciation of the labors of the State Committee by seconding the efforts and carrying out the suggestions that have been made. Every one has been satisfied with the results of the deliberations of the members of the committee as announced in the preliminary circulars, and certainly no one can fail to be pleased with the full and wise suggestions of the report just read. The gentlemen of the committee, who have given so much time and thought to the organization and continuance of the good work, have done their duty well. The teachers here present should, at their respective homes, and everywhere, use their influence, by precept and example, with teachers, patrons, and members of school boards, in promoting the formation and growth of local circles.

It is now highly desirable to enter into this movement. It should ere long be made necessary. If it were seen that the teacher who had not become a member of the local association could not so easily secure a position as the one who had entered heartily into the Reading Circle's course of study,—not because any invidious distinction should be made, but because one course of action argued indifference and lack of intelligence, the other earnestness and a desire for improvement,—the rank and file of teachers in the State would consider it highly profitable to engage in the lines of professional and general study suggested by the committee.

Teachers may do much to bring about a better state of affairs as regards this matter. It is well, as the committee recommends, that the educational officers in the State should have a voice in the control of the Reading Circles. This will give an official sanction that will be conducive to much good.

Superintendent I. N. Mitchell spoke as follows :

From the answers given to the questions relative to the examinations of teachers, it is evident that an extensive and rigid system of examinations is contemplated. This, it seems to me, involves one of the most important points in the establishment of the Reading Circle. While I am in hearty sympathy with the line of work proposed through the Reading Circle, and believe it to be very dsirable that the rank and file of the army of fifteen thousand teachers of our State should be induced to become conversant with the literature of their profession, I am led to doubt the wisdom of the examinations as a part of the proposed scheme.

If a reasonable proportion of the teachers of each county appear at the examinations, it will throw a great burden of work upon the officers of the County Circles. This work, as I understand it, is wholly gratuitous. The difficulty of securing county officers who will undertake this work for any considerable time, and do it thoroughly is very great. But it seems to me that the examination itself is a wrong tendency. There is an evolution in educational principles as certainly as in any other field of thought. In accordance with this process of evolution in our school-work, the day of universal examinations has gone by. There is an unmistakable tendency toward a loosening of the thumb-screws. Teachers are protesting against the mechanical grind of the periodic examinations of pupils. Why, then, in the treatment of teachers should we ignore the experience that we have gained in the handling of pupils? Why should we insist upon starting at the bottom again? Have we not seen enough of the evils of the examination to lead us to a better means for securing the end we desire?

I believe the method mentioned yesterday by Superintendent F. M. Kendall a good step forward. He has conducted his examinations in such a way that the pupils did not know they were being examined. The next step will be so to conduct our examinations that neither teacher nor pupils shall know that they are being examined.

As far as the Reading Circle work is concerned, the great object sought is to lead teachers to a self-improvement, especially in the line of their profession. To the majority of the teachers of our State who are not now conversant with Bain, Page, and Browning, I believe that an examination would prove a hindrance rather than a stimulus. I believe that more reading would be done, more good done, were the examination abolished and a simple statement from the candidate accepted in its stead.

Capt. H. A. Ford, of Detroit,

Said he had a communication in hand which might meet Supt. Mitchell's objection. He then quoted a letter from the Indiana Superintendent of Public Instruction showing that under the examination system of the Circle in that state correct answers at the state examinations for certificates had doubled. He also read a letter from Mrs. Delia

Lathrop Williams, President of the Ohio Circle, exhibiting some of its excellencies and the success of the system. He stated his conviction that the plan instituted by the Committee in this State is the most powerful and general instrument of culture now accessible to our teachers. He hoped, however, that some method might be adopted for expediting the organization of circles at the county institutes. Mr. Ford closed with brief reminiscences of his coming to Michigan as a teacher twenty-five years ago, and promised more in a paper to be prepared for the next meeting of the State Pioneer Society.

Prof. S. D. Barr spoke as follows:

Mr. President and Fellow-Teachers:—I did not expect this discussion would arise, and until this moment I have not expected to say a word upon the question before us. But the subject is one of so grave and far-reaching importance that I feel impelled to add my word.

It seems to me that the management of this State Reading Circle should be either wholly in the hands of the teachers or wholly under the control of the State. I think there should be no mixture of authority. Let it be particularly the business of somebody to push it, and to make it useful to the teachers and the State. In my opinion we have but a faint idea of the great good it might accomplish. But I must call special attention to one thing on which more than on any other one condition its usefulness must depend. I refer to the Township School System, under which all the district schools in the same town are organized into one system, and placed under control of a Town Board. We all remember that this Township System was brought before us for consideration a year ago. I then felt, as I have ever since, strongly desirous that some effort should be made by this Association to secure proper legislation on this subject. The matter has often, during the past year, occupied my thoughts, and the more I study it the more strongly impressed am I with the conviction that the rural district schools will never prove very efficient until some such scheme is adopted for organizing and binding them more closely together. They are now small, weak and scattered—each a feeble, solitary unit, maintaining but a sickly life. Under the Township System they would be important parts of a system, which would be controlled by a Board having ample powers, wider experience in matters of education, and charged with a great and important trust. These schools would then possess many of the advantages now enjoyed only by graded schools in cities and the larger towns. A Town Superintendent of Instruction might then be employed, and the teachers might all be brought together for instruction in their work, be held rigidly accountable for results, and be aided by a person of better qualifications and wider experience.

Under such circumstances the Reading Circle, and a course of study for teachers to pursue, would stand a fair chance of succeeding. The experience of each teacher would be greatly enlarged, and the knowledge, enthusiasm and ambition of the better teachers would have good influence. Teachers of better grade would be needed and demanded, and new life and energy would be infused into the thousands of rural district schools now isolated and weak.

Mr. President, if we desire this Reading Circle to succeed, it is because we desire good schools. Hence, we ought to desire such conditions as will render success possible. It seems to me that the teachers of this Association and of the State, ought to memorialize the Legislature, and press with earnestness their petition for legislation on this subject. And why should we not? We ought all clearly to understand that one great University, great and useful as it is, splendidly equipped, having an ample corps of professors well paid by the State, one Normal School, and one Agricultural College are not sufficient to educate the great State of Michigan, with her host of hundreds of thousands of children. How many of them will ever reach the vestibule of the University? What can it do for the multitudes of children in the rural districts?

Its course is too high for them. It can reach down with no helping hand to them, and the State does not lift her children up to its high level. How long shall this state of things continue? Now, I ask in the name of everything that is right and just, after so much has been done for the favored few, what ought the State to do for the hundreds of thousands of her children in the rural districts who still cry for help?

Fellow teachers, we have a solemn duty in this matter. We cannot expect much from an average Legislature for an object like this, unless we move in the matter. Our relation to the case is such that we ought to be heard. If we organize for earnest work we shall be heard.

It was in this way that in 1867 the public schools in the State of New York were made free. And this legislation was secured at a time when it was generally supposed many years must elapse before the auspicious time would come. And how had the people been prepared for the step? What was called the Union Free School Law had been enacted, giving to the people of any town, or of any number of school districts, power to combine and create a union free school district, and grade their schools; and still further, if they should so choose, to establish a Union Free High School. The work of union and organization at once began, and spread, until in all parts of the state such schools were organized. The work went on until a large portion of the old-time academies had been absorbed into the public school system, by the people adopting them and converting them into Union Free High schools, and supporting them by public money and local tax on property. Thus were the people brought over to the support of high school education by the state and local tax. At this stage of affairs it only required a concert of action on the part of the State Department and the teachers to convert the Legislature and make the schools free by an almost unanimous vote. The teachers were the great force in the movement.

Now, if on trial we should not be able at first to secure a law *compelling* towns to adopt the Township System, there can be no doubt that *local option* for the towns might be secured. The rest would shortly follow. According to our faith and our works shall it be done unto us.

I am in favor of this State Reading Circle; but I desire it under such conditions, brought about by legislation, that it may prove a great blessing to the teachers and to those schools which most need encouragement and help. How much faith have we? What are we going to do for the children who look for and have a right to expect help from us?

A PROBLEM IN EDUCATION.

BY PROF. CALVIN CADY, OF ANN ARBOR.

Two years since a Department of Music was organized by the National Teachers' Association. This inaugurates the first step in the solution of a problem that is to press more and more strongly upon the leaders in education. As surely as science is bound—and rightly, I believe—to be a recognizedly necessary factor in education, just so surely, though more slowly, must Art come to be recognized as necessary to any well rounded system of education. And the only objection I have to this newly organized department is that it is on a too narrow basis, and proposes to discuss the relation to general education of only one medium for the expression of man's worship of the beautiful. It should have been more broad in its scope and been named the Art Department; for the broader question of the relation of *art* to mental development is of first importance, and must necessarily include music. If, then, I confine myself to the condition of music in its relation to general education, it is not to be understood that a special plea is being made for music, but that it is taken as representative of the present condition of art in general, and is chosen rather than some other art because I happen to be more conversant with it. The present status of music's twin sister—poetry—will be found to correspond very closely to that of music, and poetry is the only art, aside from music, the master-pieces of which can be brought directly to bear upon the mental development of the masses through our public schools. Where is there a systematic study of the poetic forms of English lyrics? Where is there any special attempt made to master the science of rhythm as the basis of versification? In how many schools is there any thorough, systematic study of the rich legacy of poetic thought and imagination that the past four centuries have left to us? Where is the attempt being made to bring home to the lives of students the motive force of truth vitalized with the emotional breath of the richest poetic art works the world has ever known,—the works in our mother tongue? The study of English literature is put down in many catalogues, but what do we actually find? The students deeply studying those works which they are really capable of understanding? Not at all, but a superficial skimming through the greatest and most profound compositions. Where are our text-books of English Lyrics, and where used?

I do not wish to be understood to say that nothing is being done, for a beginning has been made, and the time is not far distant, I hope, when even in our public schools, poetry, as an art, will find its true position and exert its proper influence. I only desire to call attention to its present condition in order that, at the close of what I have to say, it may be seen that the present relation of music *is* representative of the condition of art in general.

It is astonishing with what amazement, incredulity, and curiosity is met the remark, that "the business of the teacher of music is *not* the *teaching of music.*" No one would be surprised to hear a teacher of latin or mathematics say, that his "business was not the teaching of mathematics or latin." Every one would at once understand that his *real* work touched a deeper bottom, and laid hold upon the broader, more fundamental work, viz: education. But it is humiliating to the teacher of art to be obliged to acknowledge that the moment his work is thought of the idea of education vanishes, and he is only the "professor" of music or painting, etc. This arises from a narrow view of the idea of education, and this narrowness of vision is the direct result of the utilitarian spirit of our age and country. This constricted conception drops out of consideration one of the most important of the primary activities of the human mind. The mind as a unit involves activity toward, not truth alone, nor goodness alone, nor toward merely truth and goodness, but *truth, goodness, beauty.* These three constitute the primary activities. These three are *one*, constitute the *mental unity.* Men are prone to set these in order as separate and independent mental manifestations, and according to his especial point of view, each would seek to develop that one which seems to be the most important. But these cannot be separated and individually over-developed at the expense of the others, and a well balanced and symmetrical mental unity maintained. They are so interdependent that a disproportionate development of one, mars the strength and beauty of the whole. The final aim of both truth and beauty is goodness, that is, rightness of thought and action toward God and man.

Truth and beauty appeal to intelligence and emotion. "Emotion is the moving power," and "intelligence is the guiding power." A development of motive power is as essential as the development of guiding power. Truth of any kind, scientific, philosophic, or religious, is of no value except it sink deep enough to awaken emotional activity. Until, as we say, we feel the truth, we are not moved to act in accordance with that truth. Scientific and philosophic truth, yes, even religious truth appealing to human reason is too apt to reach no farther than the intellect. But the beautiful finds its way more surely to, and acts with greater energy upon the emotional nature of the mind, and is therefore a more powerful means for the development of "motive force." Art arises from the reaching after the beautiful. It is the attempt to clothe all truth, all experiences of the soul in the language of beauty. Art must therefore be the main element in the education of this mental activity. Art thus comes to have a vital relation to all intellectual, moral, religious development, and cannot be ignored by that class of men whose special object it is to control intellectual, political, social, or religious development, or, in other words, education broadly considered. Art is in the world to stay and for good or for evil. I cannot see how it can be for good either to mental development or art itself, except it be brought into proper relation to the other educational forces,—science, literature, philosophy.

The sages of all times and countries—philosophers, statesmen, preachers,—have recognized the potency of art in education, whether they took a narrow or broad view of the latter. One of the latest political economists, Mr. Jevous, in his "Methods of Social Reform," but re-echoes Plato, Aristotle, Luther, when he says of music, that "the most practicable and immediately efficacious mode, (of bringing education and culture within the reach of the multitude), is the cultivation of pure music." And here he is speaking of the power of art where the mind is brought into a merely passive relation to it, and not of its potency were the active power of art thought and perception developed. The history of education taken in its ordinary, restricted sense, furnishes another view of the value of art. In every country, where a theoretical or practical philosophy of education has been developed, musical art at least has been recognized as an important factor. Its place in Greek education is too well known to need mention or comment. In the revival of learning it was an essential in all the academical degrees that were then created, and survives in our own colleges and universities. And in the education of the clergy it is sad to relate that it was more essential than a knowledge of the Bible or sound morals. In some unaccountable way, however, science and literature have crowded art out of the curricula for our academic degrees, and art stands in utter solitude, having no recognized correlation with any of the educational forces.

In relation to the State, history gives us a forcible illustration of the direct influence of art on political and social life in the story of the Renaissance, and the rise of the Romanticists. And it is a fact of no small significance that in musical art the greatest mind among so many great minds, Beethoven, was a believer in, and preacher of, democratic government.

But for its own sake art needs to come into vital relation to literature and philosophy. It needs to be invigorated with a higher, broader, stronger type of intellectuality. To be furnished with new truths, to be molded into living forms of beauty. If one would know how the cold, naked truths of modern science can be woven into the very fiber of a great work of art,—or rather how they can be made the germs from which has sprung much that is most beautiful in thought and utterance in a great work of art, study the Spanish Gypsy of George Eliot, where the great law of heredity, spiritual, as well as physical, has found an expression as impressive as it is poetical. It would be a pleasanter task to take a deeper and more extended view of the proper relation of art to education, but that is not my object, for I have taken it for granted that this body of educators concede that it has a proper position. My real object is to show the plain facts regarding the position it actually does occupy and present the problem of its restoration to its legitimate place. I therefore hasten on to the consideration of the present condition of music in its relation to public and private education.

I. PUBLIC SCHOOLS.

In the first place, we find that the educational laws of the land make no provision for instruction in any art, not even vocal music. Nor do they provide a systematic supervision of the teaching force that is spasmodically employed. Good, bad and indifferent teachers are employed, with the chances in favor of the indifferent and illy prepared; they usually having means of influencing school boards which are unknown to the man who trusts to the character and quality of his knowledge and work to secure him a position. Now according to the official report of the Commissioner of Education at Washington, the Hon. Mr. Eaton, there is scarcely a civilized country, and some countries that we are inclined to consider as only half civilized, that does not have laws regulating these matters, thus bringing the work and teachers under the control of the educational forces. The result of the lack of such laws in our own country is that the majority of our graded schools, not to mention the others, have no musical instruction, and the larger part of the instruction given is producing no audible, (or visible), fruits, because of ignorant, unsystematic, uneducational teachers. Take our own State as an illustration. In the educational report of 1884 we find that out of 221 graded schools only 36 report vocal music. And this report does not say whether the instruction, when it is given, is by special or regular teachers, nor whether it means instruction—*musical education*—or teaching a few songs. Twelve schools with an enrollment of from *one* to *two thousand* pupils report no music. Thirty-three with an enrollment of from *five hundred* to a *thousand* likewise report no music. The quality of the work done may be best judged by the practical fruits. And this is shown to be not very encouraging by the fact that it is so difficult to find musically intelligent singers for choruses, both in and out of the church. The tests in the University Choral Union examinations may be cited because they are applied to students from the country at large. Now these tests are so simple that a child entering the grammar grades where *educational* work in music was done, would laugh at them as sight reading tests, and yet were they used as reading tests only, but a small minority of the candidates would be able to pass.

II. SMALLER COLLEGES, ACADEMIES AND SEMINARIES.

In the majority of the smaller colleges and academies for young men exclusively there is no provision for instruction even in vocal music. But in the co-educational colleges, and especially in ladies' seminaries, music of some sort is almost universally found. But here, too, the same deficiencies are met with. Seemingly no attempt is made on the part of the authorities in these schools to get at and understand the nature of the mental processes involved in the real study of music, and their relations to mental development in general, and therefore to other branches of study. Hence they are unable to judge between educational and uneducational work, and equally incompetent to select educational teachers. The result as regards the teaching force is very plain. Music thus fails to have an opportunity to become a means for mental development. Again we observe that music rarely forms an *integral element* of the educational curriculum. No effort is made to bring into proper correlation the literary and musical studies, but the latter are classed as "extras," and placed outside the pale of studies. Music is not *studied* but *"taken."* People seldom say, "are you studying music?" it is almost always "are you taking the piano?" The studies pursued and quality of the work are another index of a radically wrong condition of things. The piano occupies the attention of the great majority. Voice culture comes next. These sum up the main work done. A few venture to take up harmony and choral music, but the organ and violin are almost unknown. And if we examine the quality of the work done with the piano and its influence upon the art, the prospect is still more discouraging.

The piano, as it is now treated, is the curse of the country in its effect upon healthy musico-intellectual growth, and indirectly upon the educational and social economy. This is apparent for the following reasons:

1. It is not made use of to develop the power of musical thought. Musical intelligence, on the contrary, is being stunted in its growth. It is so easy to acquire a certain amount of key-board gymnasticism, and piano-forte pugilism; so easy to learn a few seemingly showy waltzes, etc., that the object of the piano is lost sight of, and the key-board manipulation becomes an end and not a means. This could be forgiven more readily if this gymnasticism were of a very perfect type, instead of the worst possible sham, torturing both the ear in the multitudinous dissonances and still more multitudinous discords, as well as the eye in its sympathy for the physical contortions which would seem to be the necessary accompaniaments. Could statistics be gathered it would be found, I feel safe in saying, that *more time and money is wasted at the piano* than in all of the so-called accomplishments put together. The piano is a cloak that covers the *densest musical ignorance.* This frivolous treatment of an art which, like all arts, is the highest revelation man makes of the divine spark within him, cannot but have a debasing influence intellectually and spiritually; just as a frivolous, unthinking treatment of religious truth results in moral and religious degeneracy.

2. To the influence of the piano do we owe the decline in the study and practice of choral music. Dancing on the key-board has been substituted for the old-time, healthful social custom of part singing. And thus a powerful means for social culture, as well as moral and religious teaching and development is being lost, and cards and the dance have taken its place. The time is not far in the past when a social gathering was not complete without *ensemble* singing; when in a great number of the country districts the young people met in the district school-house to cultivate that gift of the Creator which is coeval with speech, and which is far more potent to arouse the dormant moral and religious activities of the soul. As an evidence of the decline of choral singing take the metropolis of our State. It is impossible to secure a well-balanced chorus of any size commensurate with the population, because a sufficient number of musically intelligent singers cannot be found, and do not care to devote an hour and a half a week to the study of the noblest, most elevating art works ever created.

3. The piano has opened the sluice-gates of a flood of the most trivial compositions, that do not have the merit of developing even a low order of gymnastics. The majority of these compositions are either of the most sickly sentimental type, or else dance-music. What healthful influence, mentally or morally, can you expect from this ?

4. On the other hand, while it has been the cause of so much that is mentally depraving, it has also been the means of opening the way to the great works of art. But it may well be questioned whether this is not an evil second only to the one just mentioned; whether, in fact, it is not an indirect cause for the preceding. For, with neither the preparation nor training necessary to gain any true knowledge of these works, nor the means to at all adequately express the little knowledge picked up, thousands in our colleges and seminaries are attempting to play them with all the assurance of blissful ignorance. And through such distorted caricatures mainly, people get a glimpse of real works of art, and are abused and called stupid

because of the frank avowal that they "don't like classical music." You might as well expect a healthful development of art among the people by presenting to them the distorted drawing and exaggerated colorings of lithograpic copies of the master-pieces of painting. It is plain, therefore, since the piano is the main factor in these colleges and seminaries, that, as far as educational work is concerned, the prospect is not flattering. In voice culture we meet with a good deal of the same waste of time and energy. A few songs and the great arias are tortured and twisted to meet the peculiar notions of this or that school, and many voices that by proper cultivation could be made serviceable in a chorus, are led to believe that they have got above that, and, in fact, are soloists. Ask them to read the alto to a common hymn tune and you would receive the reply: "I can't," "I never did it," "I always sing soprano." Give them the starting tone of a simple (to them unknown) song, and ask them to sing it without the piano and the result would be about the same. In short they are parrots. The development of the voice has not been a means for the development of musical thought. Many of these will talk glibly *about* music, and they perhaps *are* fairly stuffed with knowledge *about* music, but they neither *know* music nor have they gained that power of thought and perception necessary to acquire that knowledge.

III. LARGER COLLEGES AND UNIVERSITIES.

The condition of music in the few larger colleges and universities that admit it, is a little better, because in the main it is attempted to bring the art into correlation to literary work, and the more advanced mental development prepares the ground for its reception. This is especially true when only the theoretical studies (so called), like harmony, counterpoint, and composition are admitted. But in many of our colleges it is not an elective study; is separated entirely from the department of literature, science, and the arts where it properly belongs, and receives little or no sympathetic and moral support and helpful intellectual stimulus from the faculties.

IV. THE CONSERVATORIES AND SCHOOLS OF MUSIC.

These are of two classes; those having a quasi relation to some school or college, and those organized independently of any literary institution or work. Of the first class mention has been made under the second head. Of the second class, what has been said of the first regarding the piano and voice-culture holds true to a large degree, and there is too much of a pecuniary interest at stake to admit of the most solid and systematic work. The student does just as he pleases, and the work is cut to suit the "accomplishment" desires of the pupil. They are, on the whole, much better equipped with teaching forces, have a larger curriculum, and are doing more effective work in many ways, but the students lack a certain mental vigor and impetus because they are not brought into the bracing air of the literary work of the College and University.

The problem, then, is this: Art is in the world by a right divine. It is a spark of the divine, eternal truth. It *must* have its place in the economy of education viewed as broadly as you please, and it is to exert an influence for good or for evil whether you will or no. Next to poetry music is most available for general culture, and will continue to be the art most studied. How, then, can it be brought into vital relation to the educational forces of the country? Is it not time for the educators of our land to take up this question, for it concerns them as watchmen upon the walls.

Now my object has been accomplished in setting forth the condition of affairs and in stating the problem, but in closing I want to point out without any discussion, two or three necessary steps in the solution of this problem.

1st. (*a*) There should be some provision in our laws for regulating the music-teaching force in our public schools, so that inefficient teachers cannot find employment.

(*b*) Some provision should be made for the better education of teachers in our Normal schools. And in this connection I want to call attention to the difficulties my friend and colleague, Prof. Pease, labors under at the State Normal. He is expected to do the impossible, viz: To take raw material and make of it teachers of music in the short time of twenty weeks. You can't ask that of him, any more than you can ask the mathematical men to take raw material and make good teachers in the same time. Musical thought is a mental process *as difficult to develop as mathematical thought.* He ought to have more time, or else a certain amount of specified knowledge—or rather musical-thought power—ought to be required of the student before entering the normal course.

(*c*) Provision ought to be made by law for instruction in choral music in the teachers' institutes.

2. The State should foster and encourage by every means possible the study of choral music in our public and private schools. Where the majority of the tax-payers object to paying taxes for the support of a special teacher there are two possible methods for securing the instruction needed. (*a*) Secure only teachers who are competent to give the desired art instruction, and let them do the work, or, (*b*) let the public school authorities impose a small fee upon those who desire to pursue the study of choral music, furnish the room and material for work, and after deducting a per cent. necessary to meet these incidental expenses, give the remainder to a regularly appointed instructor. The teacher's salary will then depend upon the success of his work, and the tax-payers are relieved of the burden. Make the study a part of the regular work, and give due credit for it, the same as any other study, and this will be an incentive to students to enter upon the work. If the income should grow so large that it looked like a veritable bonanza for the teacher, a fixed salary could be determined upon and the surplus money could accrue to the general school fund. (*c*) The public school superintendents and teachers should encourage the formation of choral societies, orchestras, and other means for bringing music into closer relation to the social life of the people. (*d*) There should be some provision made for admitting into the public school curriculum such studies as piano, violin, etc. It may seem rather paradoxical to say this so soon after the indictment of the piano made above, but notwithstanding all that was said, the piano is here, *and is come to stay*, and it is better that it should be brought under the wing of the educational forces than to be left to itself. And, besides, it can be readily shown that the piano can, and ought to be, the *means for the highest musico-intellectual development*, and had I not felt that the side of the subject that we have looked at to-day needed attention first, it would have been my pleasure to show how the piano could be made to accomplish this end.

Finally, let me say that these practical hints that have been thrown out regarding our public schools have grown out of five years' experience, many of these points having been found practicable in connection with the public schools of Ann Arbor. And for the opportunity to make these experiments, and for their success, I am largely indebted to the superintendent, Mr. Perry, without whose generous and appreciative help nothing could have been done.

DISCUSSION OF PRECEDING PAPER.

Prof. S. D. Barr said:

Mr. President and Fellow Teachers: It is but just to myself to say that I received a synopsis of the paper just read, only about an hour before starting for this association, and that I have had no time to prepare to discuss it. I am entirely at sea as to what I shall say, but will try to say something that may apply, at least in part, to the discussion of the paper just read, and partly to the discussion of the excellent paper read by Mrs. Garrigues this morning on a subject akin to this. I am not a musician, but, as many of you must know, a teacher of mathematics; and yet I have had considerable experience in the matter of music in the public schools, having taught eight years in the High Schools of Cleveland. In all the grades of those schools vocal music was either taught, or the teaching was planned and supervised by that master in this department of teaching, Prof. N. Coe Stewart. In that city vocal music is a regular branch in every course of study, and every pupil is required to pursue it.

In the High Schools the instruction is given by Prof. Stewart, and in the Grammar and Primary schools by the regular teachers. These teachers are specially taught by Prof. Stewart, who plans their work, and directs them in its execution, visiting their schools. I know it is the prevailing opinion that a large per cent. of children can never learn to sing. A large experience, gained under very favorable circumstances, has taught me that this opinion is not well founded.

It has been demonstrated again and again that children can just as certainly learn to read, understand and correctly sing good music, as they can learn any other branch of study. It is doubtful whether there are any children with vocal organs and the five senses who can not be taught to sing. I never knew such a case in Cleveland.

In childhood and youth this matter should be taken in hand, when the vocal organs are more susceptible to training. At this time of life, too, pupils love this exercise. It is amazing what a fondness for it they acquire, with what pleasure and earnestness they enter into it when the hour arrives. It is almost incredible, to one who has not had experience, in how short a time young children will learn to sing difficult music correctly, and with perfect ease. It is one of the most common things for a grade of one hundred pupils, in concert or singly, to sing the chromatic scale, the scale by semi-tones, ascending and descending with almost absolute correctness, and with no hesitation or apparent effort. In the higher grades the four parts are sustained; and the sweetness and harmony of the music rendered by these young voices when well trained possess a charm to which few are insensible. It is no third-rate, trashy music, but standard and difficult music, choruses, anthems and oratorios.

And the time devoted to this study and practice is far from being lost. By this they are rested, and they return from it to their other work refreshed and with new zeal. This pleasing exercise, in which all engage with heart and voice, lends a charm to their school life; and in after years they will remember the old school room as an enchanted spot. Their teachers, who mingle with them in this exercise, are thus drawn nearer their hearts, and so acquire greater influence over them for good.

Now, I am unqualifiedly in favor of introducing vocal music into all our public schools. I am, however, aware that great difficulty would be encountered in the rural district schools, from the fact that they are so isolated, so feeble and scattered. The question is: How can these difficulties be overcome? In my judgment the true solution lies in the adoption of the Township System, under which at least all the districts of one town would be organized into one graded system, and placed under one Board of Education. Then vocal music could be embraced in the curriculum of study, all pupils could be required to pursue it, and the regular teachers could be required to teach music, and be held responsible for results of teaching here as in other branches. The Board could employ a superintendent of music, who might be the superintendent also of the other work, but be specially trained for this work in music. The teachers would then, as a matter of course, meet the superintendent at stated times; and he would plan, direct and train them for this as for other work, and help them to perform it. Experience has shown that under such conditions the work of instruction in vocal music can be well done by the regular teacher. In this way also drawing, or any other art study of only ordinary difficulty can be managed in common schools, if we have brains, courage and persistence to accomplish anything well in the work of education.

And, now, why should not such studies be introduced? The only ground on which any study can claim a place in school is, first, that it gives the pupil knowledge; second, that it affords discipline to the intellect; and, I will add, third, that it aids in the formation of habits of feeling, thought and action, which bring us happiness and success, and render us better and more useful members of society. I think no one will be so stupid as to deny that vocal music meets every one of these requirements. Certainly this study trains for the nicest discrimination, the severest attention, critical observation, and the most accurate and thorough interpretation. It seems to me that, in this regard, the proper study of music produces much the same effect on the discipline of the intellect and the aesthetic part of our nature, that the study of the classic languages do. It develops, refines, energizes and gives facility of action to those elements of the intellect and sensibility that are highest and best. No education which fails to compass these ends should be deemed sufficient.

The fact is, the Creator has so constituted the mind that it instinctively reaches out, on occasion presented, to perceive the beautiful, the true and the good. He has planted deep in the soul a hunger for that bread that surely came down from heaven; for throughout His material universe He has diffused this sustenance for the spirit, to feed our love for the beautiful. And throughout society, far as humanity extends, and all along down the path of history, He has displayed in human life deeds of pure and tender affection, of unflinching devotion to right and justice, of lofty patriotism and self-sacrifice. And no soul is so dead as not to be sensible of an inward movement to contemplate, imitate and gain strength from these stimulating and invigorating examples. The soul rightly developed and trained shall never cease stretching its pinions for loftier flights, to gratify this heaven-born longing, to behold more of the intense beauty of the universe, and to exult in a fuller realization of truth and justice, and their power to exalt and bless us.

Now, it is of the deepest consequence to us to know what studies and discipline, under all the circumstances, are most potent in promoting the well-being of mankind. And, in deciding this question, we are not to give undue prominence to mere material prosperity, or be governed by any sordid, utilitarian spirit. We are to look into human history, and look deep down into our own nature. If we were to live for the brief day of this earthly life, and then sleep in eternal silence, and if no generation were to come after us, then we might answer the question with little thought or concern. But we find implanted in our nature a restless element that gives us assurance of immortality, that aspires for better conditions, and prompts us to right and glorious actions, and to sacrifice for those who shall survive us. And we feel that what we are to the generation in which we live, will in large measure determine what the generation that shall come after us shall be, and that, as long as the generations shall come and go, each will transmit its own spirit to its successor.

We seem to almost take it for granted that this free government of ours is destined to stand till the end of time. We boast of our free public schools, that they will most assuredly perpetuate the institution of our freedom. But they will not prove sufficient unless we make them better and broader, till they pour into society the warm and invigorating blood of a purer and nobler life. The life which our schools have helped to develop has been too narrow. It has not produced in abundance those choicer fruits which the Creator designed. We have not paid sufficient attention to those departments which have to do with the emotions, the affections, the passions, morality and religion. No state of civilization can be long maintained which does not faithfully develop and train this part of our nature. Those influences that induce right habits of feeling, and beget in us noble purposes, and tend strongly to make these permanent, and which push us forward in work that shall bless society, and so help to make the succeeding generation nobler, are what do most to improve and perpetuate our free institutions, and to maintain our republic. It was *the spirit that gave birth* to the great Reformation that made it so mighty for good, and has stirred the world ever since. It was the *spirit and purpose* displayed in our own Revolution, and *out of which this nation was born*, that gave us this government, and our priceless privileges.

We should clearly understand, then, that our welfare depends not wholly, nor mainly, on Arithmetic and Grammar, Algebra and Geometry, but on a love of the beautiful, the true and the good—on virtue and pure religion.

Our culture should be broader. A table designed to stand on four legs stands best on all four. It is folly to undertake to build and support a mighty arch, expecting it to stand securely on one column. There are many arches, beautiful and grand, of mighty span, reaching out to the infinities, which the Creator has planned in the constitution of the human soul; and it seems to me that *all the arches* in the plan should rise as *we* build the temple, and that they should rest on columns more enduring than the pillars of Hercules, and stronger than the shoulders of Atlas.

INDEX.

INDEX.

A.

PAGE.

- Adrian College xxix
  - Character Building 72
  - Degrees Conferred 68
  - Expenses and Accommodations 71
  - Requirements for Admission 68
    - Graduation 70
  - Visitors to, Report of 74
- Aggregate Wages of Teachers 1
- Agricultural College xxiv
  - Bulletins from, Act Providing for 52
    - Issued 52
  - Changes in the Faculty 45
  - Course of Instruction in Agriculture 47
  - Course in Mechanic Arts 47
  - Degrees Conferred 51
  - Expenses of Students 50
  - Faculty and Other Officers 50
  - In Memoriam—Hon. H. G. Wells 53
  - Inaugural Address of Pres. Edwin Willits 54
  - Laboratory and Lecture Rooms 48
  - Library 49
  - Location of College 49
  - Miscellaneous Courses 49
  - New Departments and Buildings 46
  - Summary of Students 51
- Agricultural College Fund xxi
- Agriculture, Course of Instruction in—Agricultural College 47
- Albion College xxix
  - Report of the President 76
  - Board of Instruction 76
  - Number of Students 76
  - Policy Pursued in Courses of Study 77
  - Library, Laboratory, and Observatory 79
  - Property and Endowments 80
- Annual Expenses at the Agricultural College 50
  - Meeting of County School Examiners 129
    - State Teachers' Association 187
- "A Problem in Education" 225

PAGE.

- Apparatus, School, Statistics of lxx
- Applicants for Teachers' Certificates lxxii
  - Receiving Certificates lxxii
- Appointments to University Faculty 8
  - Normal School Faculty 23
- Apportionment of Primary School Interest Fund ..... xlii, xlv
- Appropriations for the University 8, 20
- Art, School of in the University 9
- Association, State Teachers', Annual Meeting of 137
- Attendance of Students at the University 5, 7
  - Normal School 26, 37
  - Agricultural College 51
  - Albion College 76
  - Battle Creek College 81
  - Detroit College 85
  - Detroit Home and Day School 88
  - Hillsdale College 92
  - Hope College 103
  - Kalamazoo College 107
  - Olivet College 111
  - Michigan Military Academy 121
- Average Annual Expense at the Agricultural College 50
  - Number of Months of School xlvii
  - Number Belonging in Graded Schools ciii
  - Daily Attendance in Graded Schools ciii
  - Monthly Wages of Teachers l

B.

- Bagley Portrait, University 10
- Barnes, Supt. Geo., Discussion at State Teachers' Association 213
- Barr, Prof. S. D., Discussion at State Teachers' Association 223, 232
- Battle Creek College xxx
  - Report of the President 81
  - Attendance 81
  - Courses of Instruction 82
  - Professors and Instructors 81
  - Text-Books 82
  - Financial Statement 83
  - Number of Students Enrolled 83
- Blair Educational Bill, Committee of Teachers' Association on 140
  - Approved by Senator Conger 144
  - Report of Committee on 214
- Board of Trustees, Detroit College 84
  - Kalamazoo College 106
- Board of Agriculture (See State Board of Agriculture).
  - Education (See State Board of Education).
- Books Adopted for Teachers' Reading Circle 217
- Branches of Instruction in Public Schools lxvii
- uhl Law Library 9
- lletins Issued by the Agricultural College 52

C.

PAGE.

Certificates, State, Granted in 1885 — 24
- Teachers', Number Granted in 1885 — lxxii
  - Suspended or Annulled — lxxii

Children, Dependent, State Public School for — 64
- Number between Five and Twenty Years of Age — xlvii
- That Attended School — xlvii
- In Graded School Districts — lxxviii

Chinese Exhibit, University — 9

College Property and Endowments, Albion College — 80
- Hillsdale College — 92

Commencement at the Normal School, 1885, Programme of — 28

Committees, State Teachers' Association — 138-140

Conductors at Teachers' Institutes — cxx

Cost Per Capita of Public Schools — lx
- Graded Schools — lx, xcvi

Council, Hope College — 101

County School Examiners, Annual Meeting of — 129
- Officers for 1886 — 131
- Members Present at Meeting — 131

Courses of Instruction at Normal School — 31
- State Public School — 65
- Battle Creek College — 82
- Detroit College — 85
- Detroit Home and Day School — 89
- Hillsdale College — 93
- Kalamazoo College — 107
- Olivet College — 111

Course of Instruction in the Mechanic Arts, Agricultural College — 47
- Agriculture, Agricultural College — 47

Course of Study Adopted for Teachers' Reading Circle — 217

D.

Degrees Conferred at the University — 4, 21
- Agricultural College — 51
- Adrian College — 68

Dependent Children, State Public School for — 64

Detroit College — xxx
- Report of the President — 84
- Trustees — 84
- Faculty — 84
- Courses of Study — 85
- Degrees Conferred — 85
- Features of Instruction and Discipline — 85
- Attendance — 85
- General Features — 86
- Visitors, Report of — 86

Detroit Home and Day School — xxxiii
- Report of the Secretary — 88
- Instruction — 88
- Number of Students — 88

PAGE

Detroit Home and Day School, Courses of Study 89
Financial Statement 90
District Libraries lxv
Drawing, Special Instruction in ciii

E.

Educational Funds xx
Primary School Fund xx
Primary School Interest Fund xx
University Fund xxi
Agricultural College Fund xxi
Normal School Fund xxi
Elective System in the University 7
Adrian College 73
Employment of Teachers, Table showing 1
Unqualified Teachers 129
Enrollment in the Public Schools xlvii
Graded Schools xxxvii, ciii
Teachers' Institutes cxxii
Estimated Valuation of School Property xlvii
Examination and Supervision xii
Certification of Teachers lxxii
Examiners, County, Annual Meeting of 129
Members of Boards of cxxix
Executive Committee, Olivet College 110
Expenditures at Teachers' Institutes cxvi
of School Districts lv
Graded School Districts lxxviii
Expenses at Agricultural College 50
Adrian College 71
Olivet College 117

F.

Fees Charged Non-resident Students in University 6
Finance Committee of Board of Regents, Report of 14
Financial Exhibit, Normal School 39
Financial Statistics of State and Incorporated Institutions cxxvii
First Grade Certificates, Number Granted during 1885 lxxii
Ford, H. A., Discussion at State Teachers' Association 222
French, Number of Pupils Studying ciii

G.

Garrigues, Mrs. A. M., Paper Read at Teachers' Association 204
General School Statistics, Table of xlvii
General Statistics of State and Incorporated Institutions cxxv
German-American Seminary, Report of Visitors to 126
rman, Number of Pupils Studying ciii
ogy in Early Education xv
o the University 9
Supt. G. W., Discussion at Teachers' Association 211

PAGE.

- Graded Schools, Statistics of ... lxxviii
  - Financial Statistics of ... xcvi
  - Miscellaneous Statistics of ... ciii
  - School Census of ... lxxviii
  - Expenditures of ... lxxviii
  - Indebtedness of ... lxxviii
  - Cost per Capita for Instruction in ... xcvi
  - Cost per Capita for Incidentals in ... xcvi
  - Enrollment in ... ciii
  - Average Number Belonging ... ciii
  - Average Daily Attendance ... ciii
  - Number of Teachers Employed in ... ciii
- Grammar School Statistics ... cxii
- Graduates at Normal School 1885 ... 27
- Greek, Number of Pupils Studying ... ciii

H.

- Halsey, Supt. L. R., Discussion at State Teachers' Association ... 221
- High School Statistics ... cx
- Hillsdale College ... xxxi
  - Report of the President ... 91
  - Trustees ... 91
  - Board of Instruction and Faculties ... 91
  - Degrees ... 93
  - Number of Students ... 93
  - Property and Endowments ... 92
  - College Year ... 93
  - Courses of Instruction ... 93
- Hinsdale, Supt. B. A., Address of at Teachers' Association ... 155
- Honorary Degrees Conferred by the University ... 5
- Hope College ... xxxi
  - the Presidency ... 101
  - the Council ... 101
  - Faculty ... 103
  - Students ... 102
  - Finances ... 104
  - Expenses ... 105
  - Real Estate ... 105
  - Visitors, Report of ... 105

I.

- Inaugural Address of Pres. Edwin Willits ... 54
- Incidentals, Cost per Capita for ... xcvi
- Incorporated Institutions ... xxviii
  - General Statistics of ... cxxv
  - Financial Statistics of ... cxxvii
- Indebtedness of School Districts ... lvii
  - Graded Districts ... lxxviii
- Industrial Education in the University ... 8
  - Agricultural College ... 46

PAGE.

In Memoriam—Hon. H. G. Wells 53
Inspectors, Michigan Military Academy 122
Instruction, Cost of in Graded Schools xcvi
Instructors at Teachers' Institutes cxx
Introductory xi

K.

Kalamazoo College xxxii
    Report of the President 106
    Trustees 106
    Faculty 106
    Degrees 107
    Courses of Study 107
Kellogg, Dr. J. H., Address on School Sanitation 171
Kendall, Supt. F. M., Discussion at Teachers' Association 194
Kindergarten, State Public School 66

L.

Latin, Number of Pupils Studying ciii
Legislative Appropriations for the University 8
Libraries, Township lxii
    District lxv
Local Committees at Teachers' Institutes cxx

M

Manual Training in the University 8
    Battle Creek College 81
    Agricultural College 46
Mather Hall, Olivet College 116
McLouth, Prof. Lewis, Address of 147
Mechanical Department, University 8
    Agricultural College 46
Mechanic Arts, Course of Instruction in, Agricultural College 47
Members of State Board of Education 26
    Teachers' Association 145
Michigan State Teachers' Association (See State Teachers' Association).
    Female Seminary xxxv
        Visitors, Report of 120
    Military Academy xxxiii
        Report of the Superintendent 121
        Inspectors, Report of 122
        Visitors, Report of 122
Military Training, Beneficial Effects of 121
    in Schools 196
Miscellaneous Financial Statistics lvii
Mitchell, Supt. I. N., Discussion at Teachers' Association 222
Monthly Wages of Teachers, Average l
Months of School, Average xlvii
Museums, University 11

N.

PAGE.

Natural Order of Study, Albion College 78

New Buildings, Agricultural College 46

  Detroit College 86

Non-Resident Students in the University 6

  Admission of to University on Diploma 8

Normal School Fund xxi

Normal School xxvi

  Changes in the Faculty 23

  Improvements 24

  Visitors 24

  Report of the Principal 26

  Attendance 26

  Graduating Class 27

  Commencement Programme 28

  Library 28

  Museum 28

  Professional Work 28

  Needs of the School 29

  Courses of Instruction 31

  Text and Reference Books 35

  Statistics of Teaching 36

  Number of Students 37

  Visitors, Report of 37

  Treasurer's Report 39

O.

Officers Elected by County Examiners 131

  State Teachers' Association 142

Olivet College xxxiii

  Report of the President 110

  Trustees 110

  Faculty 110

  Students 111

  Course of Study 111

  Library 116

  Museum 116

  Mather Hall 116

  Religious Culture 116

  Expenses of Students 117

  Visitors, Report of 118

Osband, Mrs. Lucy A.—Paper read at Teachers' Association 187

P.

Penmanship, Special Instruction in ciii

Per Capita Cost of Public Schools lx

"Personality of the Teacher" 204

Physiology, Text-Books Approved by State Boards 25

Plan of Organization of Teachers' Reading Circles 217

President's Address, State Teachers' Association 147

"President Elliot on Public School Problems" 155

PAGE.
Price List of Books for Teachers' Reading Circles 217
Primary School Fund xx
  Interest Fund xx
  Statistics cxiv
Private and Select Schools lxx
Professional Schools, University 10
  Work at Normal School 23
Public School for Dependent Children (See State Public School).

R

Raisin Valley Seminary xxxv
Reading Circle (See State Teachers' Reading Circle).
"Real Work of County Boards—Legal and Advisory" 132
Religious Culture, Adrian College 74
  Olivet College 116
Receipts at Teachers' Institutes cxvi
Requirements for Admission to Adrian College 68
  Olivet College 112
  Graduation, Adrian College 70
Resources of School Districts lii
Rogers Art Gallery 9
Rogers, Col. J. Sumner, Discussion at Teachers' Association 202

S.

School Examiners, Annual Meeting of 129
  Members of Boards of cxxix
"School Differentiation" 147
School Apparatus lxx
  Districts, Number in the State xlvii
    That Maintained School xlvii
    Graded xlvii
  Legislation, Committee of County Examiners on 131
    State Teachers' Association on 139
  Law xiv
School of Fine Arts, University 9
School Houses, Number and Material of Construction xlvii
School Property, Value of xlvii
"School Sanitation" 171
School Statistics, Comparative xxxvii
  General xlvii
Second Grade Certificates, Number Granted in 1885 lxxii
Shop Work in University 8
  Agricultural College 47
Sittings in School Houses, Number of xlvii
Special Certificates Granted during 1885 lxxii
  Teachers, Amount paid to in Graded Schools xcvi
Spring Arbor Seminary xxxiv
Somerville School xxxiv
  Report of the Principal 124
  Visitors, Report of 125

PAGE.

- State and Incorporated Institutions, General Statistics of cxxv
  - Financial Statistics of cxxvii
- State Board of Education, Annual Report of 23
  - Changes in Normal School Faculty 23
  - Improvements in Normal School 24
  - Visitors to Normal School 24
  - Examination Questions 24
  - Text-Books on Physiology, etc. 24
  - Library Books 25
  - Conclusion 25
- State Board of Agriculture, Report of Secretary 45
- State Teachers' Association, Annual Meeting of 137
  - Officers of 143
  - Committee on Resolutions, Report of 143
  - Treasurer's Report 144
  - List of Members of 145
  - President's Address 147
  - "President Elliot on Public School Problems" 155
  - "School Sanitation" 171
  - "The Law of Liberty" 187
  - "Military Training in Public Schools" 196
  - Discussion 203
  - "The Personality of the Teacher" 204
  - Discussion 211
  - The Blair Educational Bill 214
  - Report of State Reading Circle Committee 216
  - Discussion 221
  - "A Problem in Education" 225
  - Discussion 233
- State Council, Teachers' Reading Circle 141
- State Teachers' Reading Circle xviii
  - Course of Study xix
  - Method of Organizing xviii
  - Credits for Work in 130
  - Appropriation in Aid of 141
  - State Council Elected 141
  - Report of Committee of State Teachers' Association 216
  - Course of Study Adopted 217
  - Books Recommended 217
  - Cost of Books 217
  - State Depository 218
  - Recommendations of Provisional Committee 216
  - County Circles Organized 218
  - Report of Treasurer 219
  - Plan of Organization Recommended 220
  - Discussion of Report 221
- State Certificates Granted During 1885 24
- State Agent, Teachers' Reading Circle, Report of 218
- State Institutions xxii
  - University xxii
  - Agricultural College xxiv
  - Normal School xxvi

PAGE.

- State Reformatory, and Charitable Institutions xxviii
- State Depository, Teachers' Reading Circle 218
- State Public School for Dependent Children 64
  - Report of Superintendent 64
  - Number of Inmates 64
  - Age of Inmates 64
  - Course of Study 64
  - Educational Standing of Children 65
  - Kindergarten 66
  - Officers and Teachers 67
- Statistics of Teaching, Normal School Graduates 36
- Statistical Tables:
  - Comparative Statistics xxxvii
  - Apportionment of Primary School Interest Fund, May, 1885 xlii
  - Apportionment of Primary School Interest Fund, Nov., 1885 xlv
  - General School Statistics xlvii
  - Employment of Teachers l
  - Resources of School Districts lii
  - Expenditures of School Districts lv
  - Miscellaneous Financial Statistics lvii
  - Cost per Capita of Public Schools lx
  - Statistics of Township Libraries lxii
  - Statistics of District Libraries lxv
  - Branches of Instruction lxvii
  - Private and Select Schools and School Apparatus lxx
  - Examination and Certification of Teachers lxxii
  - Miscellaneous Statistics lxxv
  - Graded School Statistics lxxviii
  - Financial Statistics of Graded Schools xcvi
  - Miscellaneous Statistics of Graded Schools ciii
  - High School Statistics cx
  - Grammar School Statistics cxii
  - Primary School Statistics cxiv
  - Receipts and Expenditures at Teachers' Institutes cxvi
  - Local Committees, Conductors, and Instructors at Teachers' Institutes cxx
  - Enrollment at Teachers' Institutes cxxii
  - General Statistics, State and Incorporated Institutions cxxv
  - Financial Statistics, State and Incorporated Institutions cxxvii
  - Members of County Boards of Examiners cxxix
- Summer Normal School, Adrian College 72
- Superintendents, Amount Paid to in Graded Schools xcvi
- Supreme Court Decisions xv

T.

- Teachers' Institutes xiii
  - Receipts and Disbursements at cxvi
  - Conductors, Instructors and Local Committees at cxx
  - Enrollment at cxxii
- Text Books on Physiology, etc 24
- Text and Reference Books, Normal School 35
  - Agricultural College 47
  - Battle Creek College 58